UNHCR
The UN Refugee Agency

DER – Digital Preservation Project (DPP)

Terms of Reference for

Request for proposal to deliver an operational Digital Preservation System

Annex A

Geneva, May 2022

United Nations High Commissioner for Refugees
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1 Introduction

1.1 Who we are

The Office of the United Nations High Commissioner for Refugees (UNHCR) was established by the U.N. General Assembly in 1950 to provide protection and assistance to refugees and Internally Displaced People (IDPs). In more than six decades, the agency has helped tens of millions of people to restart their lives. Today, UNHCR is one of the world's principal humanitarian agencies; its staff of more than 18,000 personnel is helping more than 83.4 million people in more than 132 countries. Staff members work in a diversity of locations and conditions including in our Geneva-based Headquarters (HQ). A massive 90 per cent of staff are based in the field, assisting the most vulnerable victims of displacement. For more information, please see http://www.unhcr.org.

1.2 UNHCR Records and Archives

UNHCR Records and Archives is mandated to preserve and provide access to where appropriate, selected information of all kinds that is of long term and operational and historical value. Our archives contain information from the founding of the organisation in 1950 to the present-day Web Archives as well as Digital video, sound and text files. They also hold several pre-UNHCR collections, which provide valuable background to the development of protection work. The archive occupies about 10 kilometres of shelving space on two basement floors in Geneva. Our EDRMS, comprises of some 11 million documents. Our Digital Preservation System contains 62 Terabytes of selected content.

The collections are globally and historically unique in scope and content. They contain a trove of detail about important historical events, including, for example, records from the 1956 Hungarian uprising, the first major emergency in which we became operational, as well as emergencies in Chile and Argentina in the 1970s, and in the former Yugoslavia in the 1990s. The material is used both by staff and by outside researchers. Records of intractable situations where UNHCR has been working for decades, such as southern Sudan, are drawn on to brief staff as they head out into the field. By opening its archives to the public, we

demonstrate a commitment to transparency regarding our role as a humanitarian agency, and promote scrutiny and understanding of the troubled contemporary history of our world.

1.3 Overview and Objectives of this Request for Proposal

The purpose of this RFP is to procure a Digital Preservation as a Service (DPAAS) aligned with ISO 14721 deployed in a ISO 27001 certified managed Cloud solution that is secure and regularly audited delivering a compliant and cost-effective storage solution for data archiving requirements. The point of access for the material is currently via ATOM. The public archive portal is via ADLIB. We envisage further integrations with systems within UNHCR.

This solution will ensure that the servers holding the archive are managed by experts, both technical and archival to protect the survival of the data including the long-term value, trustworthiness and authenticity of data through active data curation, chain of custody and ISO compliance.

1.4 Context

Digital technology has made it possible for UNHCR to produce and use information in ways unimaginable at its foundation. Much of this is essential information that enables UNHCR to do its work of protecting and assisting refugees around the world. It is vital that we continue to develop ways to protect the selected digital material which is both operational and historical value to be part of the digital archive of UNHCR. The risks to digital content over time include alteration over time due to bit level degradation or other factors, lack of contextual information i.e., metadata as well as format/hardware/software obsolescence, in addition the scale of data. These risks threaten the integrity, reliability and survival of digital information thus affecting their evidential value.

UNHCR has implemented a recognized Electronic Document Records Management System (EDRMS) known as e-SAFE. For 25 years this has provided recordkeeping for operations. With the COVID 19 global pandemic information digitalization of offices has become widespread. Sustainability of digital information is a principle within any digitalization programme. Investing to save, maintain access to and preserve key digital content is crucial to avoid costly digital archaeology or recreation of often unique and irreplaceable digital assets.

In the life cycle approach to information, Records Management is the first step to a holistic solution for the management of UNHCR digital information. The second step was the selection of digital content which has value beyond operations and is of long-term value to the memory of UNHCR and safeguard this selected content in a digital preservation system (DPS).

UNHCR Records and Archives digital preservation strategy ensures that selected valuable digital content will be reliable, safe, accessible and useable for decades to come. Without such a strategy, this content will be lost. Preservation is not just storage or backups; it is a series of well-managed processes that are carried out to ensure that selected datasets and metadata will be preserved and accessible over time.

A key part of this strategy has been the implementation of a DPS which supports the UNHCR Mission through the protection and consolidation, in the long term, of selected digital information directly affecting people of concern. It secures sensitive information and protects investment in irreplaceable digital content often captured by staff, both international and local staff in their work. Above all the DPS protects and unlocks the potential of the digital legacy and archive of UNHCR and avoids a digital black hole of memory. Investing in this solution is a continuous commitment to ensure the survival and preservation of digital information for the future and to eliminate the needless loss of information and knowledge.

1.5 Outcomes

The outcomes of this project for UNHCR are, among other things, summarised below:

1. Implementation of an ISO 14721 DPS to continue to ensure the survival of the UNHCR Digital Archive for the long term.
2. Migration of up to 70 Terabytes of data.

3. Possible integrations of the DPS in phases over time with UNHCR systems (ATOM, ADLIB; Content Server EDRMS (e-SAFE), and implement the retirement and preservation of valuable data assets by moving them into the DPS.
4. Active preservation of digital assets stored within the DPS to ensure their survival for the long term, mitigating technological obsolescence, avoid alteration (and thus protect their integrity) and other risks to sustainability.
5. Provision of managed access where appropriate to staff members, researchers and any other audience

In particular, the system and its implementation will directly enable the following UNHCR Global Strategic Priorities:

2. "Fair protection processes and documentation" by securing individual case files and other assets essential to the safeguarding of people of concern, and making them available to support UNHCR operations.

3. "Support and management"'... effective and predictable delivery of information.' by protecting and making available information of long-term value to operations and resource management.

1.6 Scope of this RFP

1.6.1 General Requirement and Scope Definition

It is expected that the successful bidder will provide an online responsive solution capable of meeting the project requirements. UNHCR is interested in a highly secure cloud hosted solution with versions of the chosen technology already in use by other organizations and operating effectively. We are looking for a clear indication and interest of the provider in working in partnership with UNHCR to develop solutions over the time of the contract. The initial contract will be for 3 +1 +1 years.

The successful bidder's response must respond to all aspects of the project scope, and must meet all mandatory requirements described in this RFP, paying particular attention to documenting how the proposed solution would meet the requirements in Annex B. The proposal must also describe practical examples in response to the Use case.

The following is <u>in scope</u> for this project.

1. Implementation of an OAIS compliant Digital Preservation as a Service (DPAAS) solution which ensures data security and confidentiality
2. Ability to ingest content both metadata and data from various systems and deliver through ATOM and other systems as required
3. Project Management services
4. Training
5. Documentation
6. End of contract transition
7. System design
8. Integration possibilities
9. Security
10. Disaster recovery and resilience
11. Cloud Requirements
12. Sustainability and accessibility
13. Data Protection
14. Migration of data and metadata ensuring integrity of the data from start to finish.

The following is <u>optional </u>for this project:

- Pre-Ingest solution that meets the requirements as stated.

1.6.2 Anticipated Project Phases and Deliverables

The following are anticipated project phases and deliverables. Bidders are asked to include a recommended project plan with activities and milestones based on the project planning phases as part of their proposal. The plan should reflect activities based on the bidder's previous experience implementing similar projects and/or best practices for this type of project.

Table 1: Anticipated project phases and deliverables

Project Phase	Deliverables
Project management	Project Plan
Implementation and configuration phase	Implementation and configuration of system
	Training and documentation
Migration project	Project plan Migration of data from existing SP to new platform.
End of contract transition	Transition / exit plan and implementation of the plan as required

Service	Deliverables
Hosting and storage	Cost for storage increase of 10 TB to c.200TB
Service level Agreement	Service Level Agreement covering all service support provided by the supplier.

Supplementary Services	To include such work as future integrations; consultancy and advice.

1.6.3 Project Methodology and Quality Assurance

The project will follow UNHCR's project methodology based on PRINCE2, however the selected bidder's project and deployment methodology will be considered for activities executed by the bidder. The bidder is requested to describe their project and deployment methodology in their proposal, along with an explanation of their quality assurance processes**.**

The bidder is supplying the entire essential workforce for the implementation, and support and maintenance as well as for future developments such as certain integrations.

1.6.4 Methodology for Product Selection and Proposed Project Schedule

In accordance with United Nations (UN) procurement rules, an RFP process will need to be followed to select a bidder, which involves responding to the requests made in this document and to the comprehensive set of requirement questions contained in its annexes. The 'fit' of the proposed solution to the given requirements and the quality/completeness of these responses will be used to judge the capabilities of the bidder.

Out of the bids received, a short-list will be compiled. A presentation /workshop will be requested from the short-listed bidders to present their proposed solutions based on the given requirements matrix (Annex B). A face-to-face meeting will be organized by web/teleconference or physically at UNHCR Headquarters in Geneva, Switzerland. The estimated start is the December 2022.

Table 2: Planned RFP Schedule

Task	Date
RFP sent out to bidders	Friday 10 June 2022
Deadline to receive questions from bidders	Friday 1 July 2022
Deadline to respond to bidders question	Tuesday 12 July 2022
Deadline for receipt of Proposals	Tuesday 9 August 2022
Presentation / workshops of short-listed bidders /Final Evaluation (if required)	Monday 12 – Friday 23 September 2022
Award of Contract	Monday 5 December 2022
Migration	6 months

2 Digital Preservation Project

2.1 Overview

The overarching goal of this project is to implement an ISO 14721 Digital Preservation System as a Service (DPAAS) solution deployed in a Cloud solution which is an ISO 27001 certified managed service that is regularly audited delivering a compliant and cost-effective storage solution for data archiving requirements. The point of access for the material will be via our ATOM/ADLIB[1] catalogue. This solution will ensure that the servers holding the archive are managed by experts, both technical and archival to protect the long-term value, trustworthiness and authenticity of data through active data curation, chain of custody and ISO 27001 compliance.

2.2 Logical architecture

There is a logical architecture document that was drafted alongside these requirements that represents our current configuration. See Annex E. The logical architecture provides a consistent vocabulary for the system components and is based upon the OAIS reference model, which is used in this document.

2.3 OAIS

The Open Archival Information system (OAIS) reference model is the framework when considering requirements for the repository system. The categorisation of requirements, structure of this document and many of the terms used in it are taken from the OAIS reference model. Proposed solutions must be able to demonstrate that their architecture is strongly aligned with the OAIS model (ISO 14721).

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[1] ADLIB is UNHCR Archives' online catalogue system

2.4 Support for recognised open domain services

The procured system must support existing, non-proprietary standards used by the archival and digital preservation community. Examples are given in the requirements and include:

- Bagit for Submission Information Packages
- OAI-PMH for metadata exchange
- METS as metadata container
- ISAD (G), Dublin Core and MODs for descriptive metadata
- PREMIS for preservation metadata

Use of open standards is important as it facilitates interoperability with external systems that support those standards. Additionally, the use of standards for the internal storage and export formats of content and metadata protects against vendor lock-in and the event that the supplier goes out of business.

3 Functional Requirements

3.1 Overview

The following represents the high-level functional requirements that need to be addressed by the bidder's proposed solution. The detailed technical requirements which require bidder responses are included in Annex B.

3.2 Pre-Ingest

While UNHCR has its own pre-ingest workspace, in addition suppliers are invited to submit their own pre-ingest/transfer solution as a desirable requirement. The workspace should provide a secure gateway for material submitted to the preservation store. The workspace should provide a similar level of bit preservation functionality as the preservation store and enable secure basic protection such as backup, anti-virus checks as well as check summing content in a secure environment.

3.3 Ingest functional facility

These requirements describe the transfer of material from the pre-ingest area into the preservation system. Material is submitted to the preservation layer as Submission Information Packages (SIPs). These are augmented by the preservation system at ingest to create an Archival Information Package (AIP) for long term preservation. All are covered in Annex B FR-IFE, please respond in detail and identify where it is referenced in your proposal. Please see Annex B for the full list of requirements and respond.

3.4 Administrative functional entity

This feature coordinates the information of the objects, their associated metadata and the system information that supports the archive. It maintains the database that contains the archive's information; generates reports in support of other functions; and updates the database. It also maintains databases of metadata such as descriptive/administrative/technical and preservation metadata. All are covered in Annex B FR-AFE, please respond in detail and identify where it is referenced in your proposal.

3.5 Archival Storage Functional entity

This feature concerns the archival storage subsystem that provides long term preservation of digital content and metadata including regular and cold storage as well as regular monitoring of integrity. The preservation metadata store provides a queryable data store for all metadata required for long term preservation, see logical architecture in Annex E.

3.6 Data Management functional entity

The data management function must enable the association of data at different levels of granularity – for example metadata could be attached to a collection, a group of files or an individual file allowing the search across key metadata fields. All are covered in Annex B FR-DME, please respond in detail and identify where it is referenced in your proposal. Please see Annex B for the full list of requirements and respond.

3.7 Preservation Planning

The preservation planning entity must provide file format registry support, assistance in preservation plans for file format preservation as well as allowing the planning to be executed. All are covered in Annex B FR-PP please respond in detail and identify where it is referenced in your proposal. Please see Annex B for the full list of requirements and respond.

3.8 Export functional entity

The export facility should allow bulk transfer to allow the data to be independently understood. An Escrow for the data must be considered. All are covered in Annex B FR-EES, please respond in detail and identify where it is referenced in your proposal. Please see Annex B for the full list of requirements and respond.

4 Non-functional requirements

4.1 Overview

Non-Functional requirements describe system attributes such as security, reliability scalability, maintainability and usability. In addition, they may include restrictions on the design of a system also referred-to as design constraints. The NFR are as follows

4.2 Company information

Provide details of company history and qualifications to satisfy the requirements of this tender, including prior experience with related organizations and projects, professional indemnity. All requirements are covered in Annex B CI-NTN, please respond in detail and identify where it is referenced in your proposal. Please see Annex B for the full list of requirements and respond.

4.3 Support and training

Provide details of all support and training including agreements covering all service support provided. Suppliers must supply SLA models consistent with the optimal performance of a Digital Preservation and Access system and demonstrate the various levels of SLAS plus costs of same. All requirements are covered in Annex B FR-SLA and FR-TR, please respond in detail and identify where it is referenced in your proposal. Please see Annex B for the full list of requirements and respond.

5 Additional Requirements

Other requirements can be found in Annex B with the following themes:

- Systems design
- Integrations
- Pre-Ingest
- Security
- Sustainability & Accessibility
- DPIA

5.1 SAAS security requirements

UNHCR will assess bidders SAAS offering based on a CAIQ: Consensus Assessments Initiative Questionnaire v.3.0 (**Annex G**). UNHCR will retain the right to audit the CSP security provisions/stipulations as it deems appropriate. In addition, bidders must:

1. Indicate their agreement by complying with Cloud Computing Special Conditions **(Annex H).**
2. Demonstrate security assurance level of ISO 27001:2013 certification for security management for services within scope of the engagement.
3. Indicate that they take full responsibility for the security of the underlying platforms (as per its contractual agreements with these suppliers), including informing UNHCR of security breaches that may compromise the security for the data hosted n the SaaS platforms. The process to inform UNHCR of such security breaches is t be clearly described in the proposal. Underlying platforms include, but are not limited to, the cloud infrastructure including networks, servers, operating systems and storage.
4. Provide CSA STAR certification. (AES 256 encryption would be preferable).
5. The bidder is also asked to provide evidence of any third-party validation of security controls implemented at the CSP in the form of recent security audits or risk assessments.

The bidder is also encouraged to/should demonstrate security assurance by having the following *cloud service specific certifications:*

- ISO/IEC 27017:2015 (Code of practice for information security controls based on ISO/IEC 27002 for cloud services)
- ISO/IEC 27018 (Code of practice for protection of Personally Identifiable Information (PII) in public clouds acting as PII processors)

5.2 SaaS requirements

The supplier must provide their responses to the non-functional requirements in the table provided. The matrix contains several worksheets including non-functional requirements. The supplier is requested to identify and demonstrate how each requirement is met (or not) and provide proof and explanations in each column. (Annex B)

Please respond in detail and identify where it is referenced in your proposal. Please see Annex B for the full list of requirements and respond.

6 Responses

The supplier must provide their responses to the functional and non-functional requirements in their proposal as well as responding to the requirements in Annex B matrix. The matrix contains several worksheets including non-functional requirements. The supplier is requested to identify and demonstrate how each requirement is met (or not) and provide proof and explanations in each column.

7 The expected role of the bidder

7.1 Prerequisite experience

Relevant previous experience with Digital Preservation will be assessed as a part of the evaluation criteria. UNHCR will give favourable consideration to responses from companies with demonstrable experience in similar situations.

7.2 Partnership

UNHCR is a very large humanitarian organization with rapid and ever-changing needs working in some of the most challenging situations in the world. The project needs a collaborative approach with the chosen supplier to be one of partnership. While understanding the financial implications of developments, the willingness to rise to challenges posed by the environment in which UNHCR operates will be an essential part of the client-supplier relationship. Demonstrate and prove how this will be achieved must be a part of the procurement process.

7.3 Project Management

The bidder is expected to provide a project plan with sufficient detail on the approach to delivering implementing and configuring the system. Estimated start and end dates for the phases of the project will be expected.

7.4 Vendor Project Management Activities

The bidder is expected to provide a Focal Point to lead the bidder resources and activities with close collaboration with the UNHCR Project Manager.

7.5 Maintenance Services

The bidder is requested to provide details of on-going maintenance and support requirements to keep the proposed solution up to date and 'alive'. Details of annual maintenance and support options and their associated costs are expected to be shown in the bid. Aspects of support to be included are: grading of issues according to impact and severity, response times and resources associated with levels of severity, penalties for not meeting agreed service levels.

7.6 Training Services

The bidder is expected to describe the type of training that is included as part of the offer, along with a detailed description of the proposed functional and technical training.

7.7 Supplemental Services

The bidder is expected to describe the type of Supplemental Services they can offer. This

would include, for example:

1. Optional consultancy services that would be available for possible future work.
   Such as integrations with other UNHCR systems such as Orange logic, SharePoint and so on. This should be expressed as a daily rate, both inclusive and exclusive of travel costs. (Costs are not to be included in the technical proposal, please use **Annex C**, Financial Offer Form)
2. Optional costing model and information for additional training, should it be required in the future. This should be expressed both by module and daily rate, both inclusive and exclusive of travel costs. (Costs are not to be included in the technical proposal, please use **Annex C**, Financial Offer Form).

8 Proposal

8.1 Overview

This section provides bidders with the guidelines for and the structure of their proposals. Please ensure this is respected. Please note that UNHCR is looking for bids and proposals that will communicate an understanding of the context and the job that needs to be done and offer solutions and added value. In addition to addressing the elements in the TOR as part of their technical proposal, bidders are required to submit a completed Annex B to this RFP with details on how their proposed solution would meet the requirements.

8.2 The proposal should be submitted as follows

In Annex B, each requirement must receive a full response, in order and by number, indicating either whether the service provides the capability, or not. In order to respond to this RFP the bidder is invited to respond to these requirements by selecting one of the options: whether the requirement is (i) "fully met" by the proposed solution; (ii) whether there is a "work around" or ability to "customise (must indicate if a major or minor customization is anticipated)", in which case the estimated costs must be stated; or (iii) whether it "cannot be met." Vendors must comment on each answer.

The successful bidder will take a holistic view of this project and not just respond to the lists of requirements.

The proposal must be organized in direct response to the functional and non-functional requirements. The vendor response should be structured in the following way:

    a. Introduction to the vendor
    b. A Project Plan
    c. Responses addressing each requirement to be preferably entered into the requirements excel documents. If there is a need for further elaboration please add these to the vendor response clearing indicting the Requirement ID.

It should be noted that UNHCR wishes to avoid the situation where vital services required during the project are belatedly declared as "not included" or "not implied" by the requirements attached in the Annexes. It is important to establish an open and honest working relationship whereby the bidder has a complete understanding of the project objectives and aims to help us achieve them from the outset and over time. Please show UNHCR that you have understood this.

8.3 Pricing

It is essential that the pricing component of the vendor proposal is <u>submitted separately</u> from the functional and non-functional component. In this section, the requirements for the pricing of bids are set out. The Table tree below is included in order to give clarification about the project phases with the aim of helping bidders to propose appropriate costing models for the identified phases.

Table 3: Project Phases and Deliverables

Project Phase	Deliverables	Pricing Type
Project management	Project Plan with milestones	One-off

Implementation and integration Phase	Implementation of system	One-off
	Configuration	One-off
	Integration with ATOM/ADLIB	One-off
	Training and documentation	One-off
Migration	Project plan	One off
End of contract transition	Transition / exit plan and implementation of the plan as required	One-off

Ongoing costs	Deliverables	Pricing type
Hosting and storage	Cost and model of cloud storage per terabyte	Costs for 3 +1+1 years
On-going Operational Support & Maintenance, SLAs	Support and maintenance contract	Costs for 3 +1+1 years levels of service.
Supplementary Services	To include such work as future integrations; consultancy and advice.	Daily Rate
Escrow	Escrow service	Costs for 3 +1+1 years

9 Evaluation

9.0 Pre-selection Evaluation

A pre-selection will be performed based on Annex B questions CI-CQ-001 to CI-CQ-007. Companies will pass the pre-selection with a score of 60% or more and will be invited to provide a presentation of their technical offer. Offers from companies below the 60% score won't be processed any further. The presentation should give a brief overview of their product and how it would be configured/scaled to meet UNHCR's requirements.

9.1 Technical Evaluation

The Technical offer will be evaluated using inter alia the following criteria:

Company Qualifications	- General liability/ capacity of the company - Capacity and location of support office - Relevant Sector Experience and experience in not for profit and/or UN - Previous relevant projects executed
Proposed Services	- Comprehensiveness of proposal - Functional requirements - Non-Functional requirements
Personnel Qualifications	Experience of core people who will work on project (including experience with similar projects, and not for profit/UN experience)

The evaluation of the technical offer will represent 65% of the total score; the financial evaluation will be weighted such that it is 35% of the evaluation score.

10 Key Performance Indicators

10.1 Performance Evaluation

UNHCR expects to monitor the performance of the selected supplier.

1. Timely delivery and implementation of a Digital Preservation system which satisfies the stated requirements.
2. Migration of content
3. Project kept within the contracted budget
4. Providing the required level of effort
5. Ongoing technical maintenance and support

Any UN and/or humanitarian organization discounts must be clearly stated.

Please note that the pricing component must be submitted separately - Please refer to the Request for Proposals for instructions about Manner of Submission and specific pricing matrix you are requested to use in your response.

11 Considerations

11.1 Overview

UNHCR will provide answers to questions that prospective bidders may have during the period leading up to the submission of the bids. (see Table 1 for planned RFP schedule)

11.2 The UNHCR Team

An internal team will be assigned to the project.

11.3 Risk Management

The bidder will assume a direct responsibility for risk management to the extent that project deliverables should not be imperilled. To this end, the bidder will work with UNHCR project management to ensure that risk is at all times identified in a timely manner, and managed to ensure that the project is not adversely impacted. Appropriate documentation will be maintained for UNHCR project management.

11.4 References

Please supply references, as these will be checked during the evaluation phase.

12 Glossary

CET	Central European Time
DER	Division of External Relations
DIST	Division of Information Systems and Telecommunications
HQ	Headquarters
RAS	Records and Archives Section
RFP	Request for Proposal
UNHCR	United Nations High Commissioner for Refugees

13 Annexes

Annex Number	Annex Title
Annex A	Terms of Reference
Annex B	Technical Offer Form
Annex C	Financial offer form
Annex D	Vendor registration form
Annex E	Architecture
Annex F	CAIQ: Consensus Assessments Initiative Questionnaire v 3.0

Annex G	UNHCR Cloud Computing Special Conditions
Annex H	UNHCR Special Data Protection Conditions
Annex I	UNHCR General Terms and Conditions for the Provisions of Services -

FINAL