

TECHNICAL REQUIREMENTS

Creation of an Online Platform for hosting IDPs in collective sites CS

LIST OF ABBREVIATIONS

Ministry of Reintegration (Customer)	Ministry of Reintegration of Temporarily Occupied Territories of Ukraine, Ministry
System, Electronic account	The web interface of a single point of access to electronic services
Authentication	The procedure for establishing whether a user owns information in the system of the identifier presented by him
Authorization	Checking, confirming and/or granting the user rights to perform certain actions, access to information resources in accordance with the performed earlier authentication
The administrative part of the system (content management system, CMS)	An information system that allows authorized users to make changes to the hierarchical structure and information content of the system without using any additional special software tools
System administrator	A specialist who provides technical support for the system
Dashboard	A tool for visualization of monitoring results, a set of interactive graphs, and CS indicators
Filling, content	A collection of the data content of the system. Includes texts, images, files, etc. intended for users of the system
Registration	Adding a user to the list of system users
Role	A class of system users who have a certain set of access rights.
Role model	Rules for the distribution of user credentials in the system
RMA	Regional Military Administration
Card or electronic document	A document in which information is recorded in the form of electronic data, including mandatory document details
IDP	Internally displaced person
Bed-place	A part of the room with a bed and furniture for storing personal belongings, bedding (mattresses, pillows, blankets, bed linen), provided for temporary compact residence of several adults of the same sex at the same time, not

	connected by common life or family relations.
CS	Collective site of IDPs

1. General description

The information system of the CSs list (hereinafter – the information system) is created as an adaptive web-application to ensure the possibility for IDPs to familiarize themselves with the up-to-date list of CSs, the number of free beds and living conditions, which are displayed on the dashboard.

The dashboard should display information about the list of CSs on the territory of Ukraine with the ability to filter data by location, number of available beds, and living conditions. Information on available beds and living conditions on the dashboard must be updated in real-time. The CS rating should be displayed on the dashboard.

The electronic account allows you to enter the necessary information about CS. Formatting of reports.

2. Model Roles

2.1. Administrator: An administrator is a representative of the Ministry of Reintegration or an organization to which the Ministry of Reintegration has granted (delegated) the right to perform administration operations. Provides access for other users, deprives users of access, performs other administrative operations in the system.

2.2. Technical Administrator: A technical administrator is a representative of the Ministry of Reintegration or the organization to which ministry granted the right (delegated) to perform operations for technical support of the information system.

2.3. RMA Representative: The RMA representative checks, edits (if necessary) and approves the information about the CS that is sent to the electronic account. Reviews CS of the region.

2.4. CS Manager: The CS Manager – enters information on the location of the CS, the number of free beds and living conditions. Updates information on the number of free beds and living conditions in CS. Considers booking applications for IDPs placement in CS.

3. Business processes

3.1. User registration, granting and revocation of user access rights to the information system by the Administrator

Register and grant access rights "*User (RMA Representative)*" or "*User (CS Manager)*" only the System Administrator can access the Information System (*see 2.1 - Administrator*) after a written request from the user (*RMA Representative*) to the system owner regarding granting such access.

After receiving the request and checking the requested data, the Administrator must grant the necessary rights to the specified users within seven days.

The data which is necessary to provide access to the user in the information system:

- full name;
- contact phone number;
- confirmation of the authority of the CS Manager.

User authorization is performed using automatically generated login and password provided by the System Administrator. After the first authorization, the user must change the password to a new one. The password must be updated at least once every 3 months and meet the complexity requirements.

3.2. CS card statuses with public data on the dashboard:

3.2.1. New record – the status of the newly created CS card in the account of the CS Manager. The CS manager creates a CS card by clicking the "New card" button.

3.2.2. In progress – The CS Manager has filled in all the necessary fields of the card and after clicking the "Save" and "Send for approval" buttons and entering the user's password, sends the card for approval to the RMA Representative (*see 2.4 – User (RMA Representative)*).

3.2.3. Approved and published - The RMA representative has processed the card with data on the CS and, by clicking on the "Approved" button and entering the user's password, confirms that the entered data is correct. The CS card is automatically published on the dashboard.

3.2.4. Rejected *reason* - The RMA representative has processed the card with the data on the CS and found discrepancies in the entered data, clicks on the "Send for revision" button, specifies the reasons for the rejection and enters the user's password. The card is returned to its author for revision, about which a notification is sent to the user's electronic account and/or via e-mail. The CS card goes into status *3.2.2. In progress*.

3.2.5. Updating data - in the event of a change in the number of free places in the CS or living conditions, the CS Manager must press the "Edit" button on the CS card and enter the updated information. After making changes, press the "Save" and "Send for approval" buttons and confirm the changes by entering the user's password. After that, the data is approved by the RMA Representative and the CS card goes into status *3.2.3. Approved and published*.

3.2.6. Inactive - the status of the CS card in which there are no free places or the CS object has changed. The CS card is automatically removed from the dashboard.

At all stages, the system automatically saves the card as a draft until it is saved and approved.

3.3. Creating a CS card (electronic document) and entering information about it.

The user (CS Manager) creates a CS card that should have several tabs/sections and enters information about the CS, namely:

3.3.1. Main tab/section:

- CS address (region, district, territorial community, settlement, street);
- contact details of the CS responsible person (phone number and work email address);
- the total number of beds in the CS;
- the number of free beds at the time of entering the information;
- the number of beds occupied by IDPs without concluding a contract (subclause. 2 clause 7 of Resolution No. 930);
- compliance of CS with the minimum requirements for the livelihood of IDPs with photo confirmation of the premises, which are equipped with beds, places for cooking and eating, as well as food storage, means of unobstructed access for persons with disabilities and other groups of the population with reduced mobility, etc.;

- Availability of the shelter in the CS itself or the address of the nearest shelter located within a radius of 500 meters from the CS and the capacity of which is not less than the number of beds provided for accommodation in the CS itself;

- CS owner (balance keeper). If the CS Manager is the CS owner, it is necessary to put a "tick" in the field *"The CS Manager is the same as the CS owner."*

The above information is publicly available and displayed on the dashboard of the information system.

3.3.2. Additional tab:

- living conditions in CS in accordance with clause 8 of the Procedure and Appendix 2 to Resolution No. 930;

3.3.3. Additional tab:

- information on the list of persons living in the CS, filled in according to Appendix 4 to Resolution No. 930 without specifying passport data and year of birth;

3.3.4. Additional tab:

- the results of CS monitoring filled into the information system by the RMA Representative. It is available for editing by the RMA Representative and for review by the CS Manager (Clause 8 of the Procedure and Appendix 2 to Resolution No. 930).

The specified information can be viewed by the CS Manager, RMA Representative and Information System Administrator in the form of reports. If necessary, the report is generated by the dates of transactions to facilitate monitoring.

After filling all the above data, the CS Manager sends the CS card to the RMA Representative for approval by pressing the "Save" and "Send for approval" buttons (see 2.3 *User (RMA Representative)*).

In case of changes in living conditions or increase/decrease of beds in CS, the CS Manager must update the relevant information in the card of this CS.

Available only for the CS Manager role (see 2.4 – *User (CS Manager)*).

RMA representative (see 2.3 – *User (RMA Representative)*) must be able to edit and leave comments on the information contained in the CS card.

The CS Manager, RMA Representative and Administrator can receive information about editing the card via e-mail and in the message feed of the electronic account.

3.4. The logic of entering information about a CS in the corresponding card by the CS Manager and its further processing by RMA Representatives

To start work, the CS Manager must log in or register in the system and obtain the appropriate access rights, as described in clause 3.1.

Having received access to the system, the CS Manager must create and/or fill in the appropriate CS card and enter data indicated in clauses 3.3.1-3.3.3. After entering the data, the CS Manager clicks on the "Save" and "Send for approval" buttons and enters the user's password, thereby confirming the specified data. After the filling is completed, the CS card is sent for processing to the RMA Representative, who is obliged to check the data entered on the CS card. The RMA representative must approve the CS map by clicking on the "Approved" button and entering the user's password if all the data entered by the CS Manager is correct or reject if there are discrepancies, by clicking the "Send for revision" button and send for the CS card for revision.

After the MRP card is successfully approved by the RMA Representative, it is automatically published on the dashboard, and can be viewed by any Internet user. The card displays information about free beds available in CS and living conditions, described in clause 3.3.1.

3.5. Dashboard with a CS list

The Dashboard features an interactive map showcasing the locations of the CSs listed in the official list approved by the Ministry, along with links to individual CSs pages. The dashboard displays information about a CS, namely: location, number of available beds and living conditions. The dashboard should be publicly accessible to all Internet users.

The user must be able to filter the CSs by the following fields/conditions but not limited to:

- region;
- area;
- territorial community;
- settlement;
- number of free beds;
- area allocated for one bed;
- temperature in the premises of the CS;
- availability of shelter in the CS itself;
- the number of sanitary and hygienic premises;
- availability of means of unhindered access for persons with disabilities and other less mobile population groups;
- availability of sanitary and hygienic premises equipped for persons with disabilities and groups of the population with reduced mobility;
- number of washing machines and dryers;
- availability of water heaters (boilers) in sanitary and hygienic premises.

3.6. The process of forming the CS rating

The information system forms the CS rating based on the completeness and reliability of the data entered into the CS card by the CS Manager in accordance with clause 3.3.2.

Also, the rating should be partially formed on the basis of the CS monitoring results entered into the information system by the RMA Representative in a separate tab of the CS card (3.3.4). The RMA representative is obliged to monitor the condition, arrangement, number of residents and free beds in PTR **no less** than once every six months.

10 days before the next monitoring, relevant notifications about the approaching deadline for the next monitoring will be sent to the message feed of the e-account and/or e-mail. The term of the next monitoring is set by the system in 6 months from the date of the last monitoring.

Options for setting the rating conditions are available for the role 2.1 - Administrator.

Entry of monitoring results is available for role 2.3 – RMA Representative.

3.7. Reservation of beds in CS through the dashboard of the information system using a phone number or email address

According to their own needs, the IDP can filter the CSs on the dashboard according to the living conditions and, after choosing the necessary CS, book the required number of beds in the selected CS for the relevant date, specifying the following information:

- mobile phone number;
- full name;
- Number of places needed.

After entering the relevant data into the reservation form the IDP must give consent to the processing of personal data specified in the questionnaire and agree with the rules of residence in the selected CS by selecting 2 "checkmarks". One can get familiarized with the rules of residence by clicking on the link.

If the selected number of booked places exceeds the number of free beds in the CS, the system should indicate an error and offer to choose another CS or reduce the number of places for reservation.

After confirming and sending the reservation form, the number of free beds of the selected CS displayed on the dashboard will decrease by the selected number of IDPa. Reservations are available only 3 calendar days before the planned moving in to the CS. Also, a reservation is valid for another 3 days from the planned date of moving out, after that the reservation is automatically annulled and the number of beds in the CS displayed on the dashboard is changed.

Before booking, the IDP must pass a bot check to prevent large load on server capacities with potential spam, to prevent failures in the information system.

During the moving-in of an IDP who has reserved the corresponding number of beds, the CS Manager must check the fact of the reservation and matching of the data of the indicated IDPs. The CS Manager must mark the fact of moving in in the Information System and confirm the reservation or cancel it in case of refusal to the IDP to be accommodated in the CS.

4. Reporting

4.1. Report on the list of persons living in the CS

Information regarding the list of persons living in the CS must be displayed in the form of a table in accordance with Appendix 4 of Resolution No. 930 with the date of moving in and moving out of each IDP. In addition, the report should show the number of free and occupied beds by date. It should also be possible to choose a specific CS for which the report will be generated.

The CS Manager should be able to create a report only for his own CSs.

The RMA representative should be able to form a report based on the region, district, territorial community or settlement within the region itself.

The Administrator should be able to create a report by region, district, territorial community, settlement, and country.

4.2. Report on monitoring the CS condition and arrangement

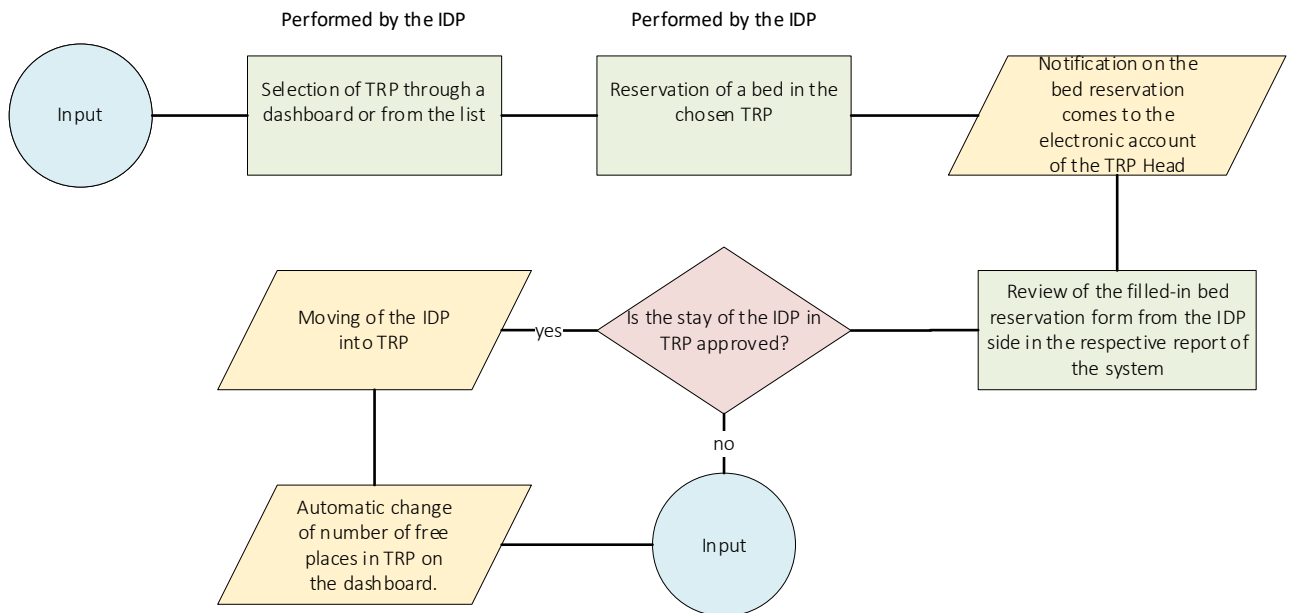
Formatting a checklist for monitoring the CS condition and arrangement, in accordance with Appendix 2 to Resolution No. 930. The report should display information on the date of entering information into the system, that is, every user action in the information system. This report should also display the CS rating and provide the ability to filter CSs by the specified attribute.

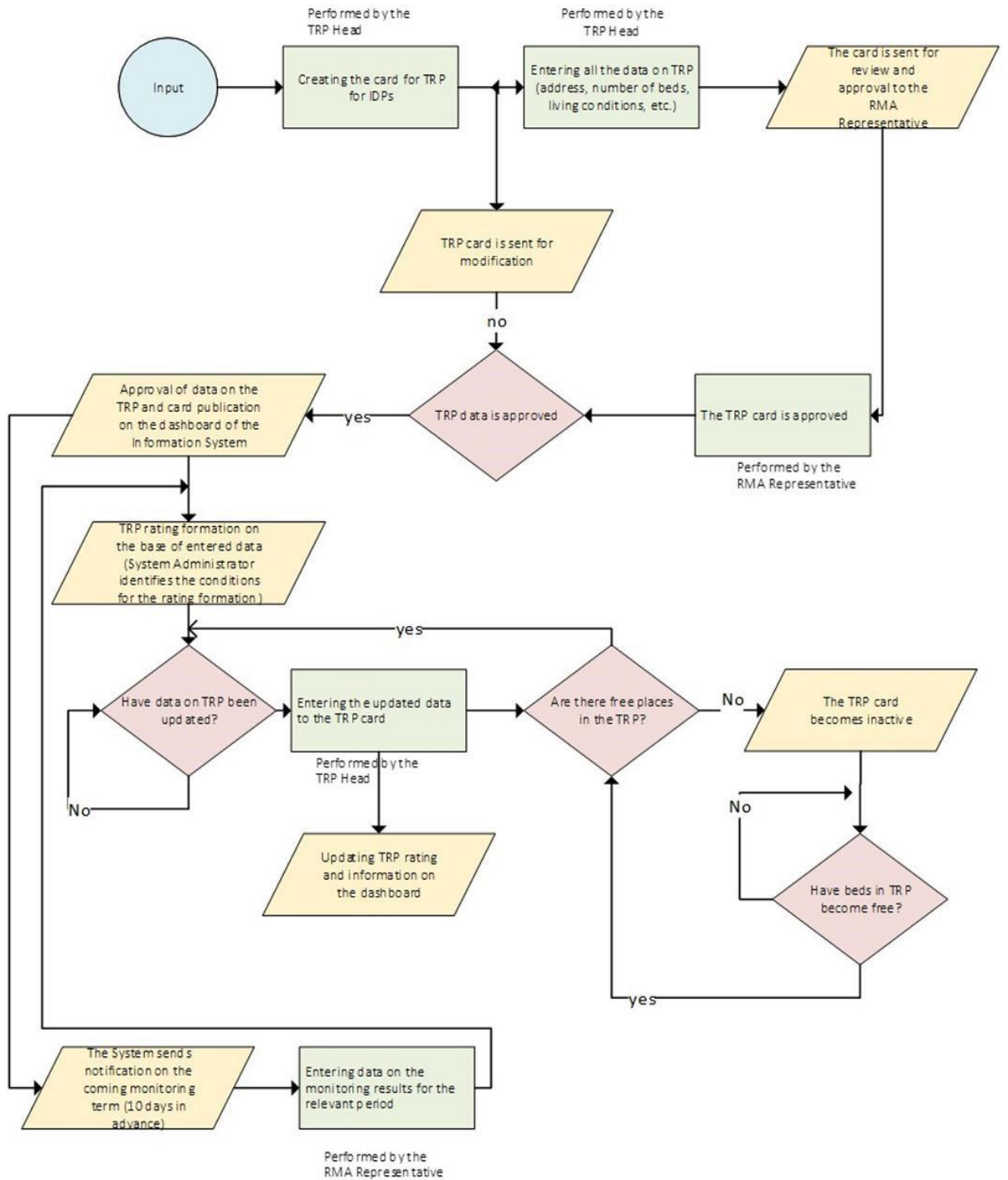
Information on the checklist for the CS condition and arrangement monitoring should be displayed in the "Reports" section of the user's electronic cabinet. The feature must be available to the role of *Administrator* and *2.4. User (RMA Representative)*.

4.3. Report on booked beds in CS

The CS Manager must be able to review applications for the reservation of beds in his/her own CS(s) and, if necessary, confirm the moving in of IDPs or cancel the reservation.

The RMA representative must be able to review applications for booking beds by region, district, territorial community, or by settlement within the region itself.





5. Additional requirements

5.1. *Scaling*

- The expected number of users – 2000+; The System to be able to handle minimum 1500 simultaneous users.
- The number of CS cards – 2000+; The System to be able to handle minimum 1500 CS cards.
- The Platform shall support the following file and document types: jpg, jpg2, png, raw, heif, tiff, pdf, doc, docx, xls, xlsx;
- Ensure vendor independence: implement the project in such a way to be able to transfer the project/code from one service provider to another without hindrance or dependencies on the executor. The Platform is developed subject to vendor independence and with the option of transferring its maintenance from the service provider without any obstacles or restrictions;
- System load testing: Before the system is launched, testing will be carried out to determine the maximum workload that the Platform can withstand without interruptions in its operation.

5.2. *Integrations*

- Creating own API to enable and simplify further integrations with other services
- The Platform will be integrated with the “Trembita” system to ensure effective interaction between them.

5.3. *Intellectual Property*

- The Ministry of Reintegration of the Temporarily Occupied Territories holds ownership of the project and its intellectual property. The owner is the state represented by the Ministry of Reintegration
- The administrator is a legal entity under public law, determined by the owner

5.4. *Security of personal data*

- Use encryption: Personal data will be encrypted using Transparent Database Encryption and other file system encryption methods
- Create a user authentication process: The Platform will be equipped with an authentication process to ensure secure access to the system
- Password complexity:
 - The minimum password length is 8 characters, at least 1 special character and at least 1 number;
 - Limitation of the validity period of the password - 3 months;
 - Blocking the user's account after three unsuccessful attempts to enter the password;
 - Storage of passwords in the system in encrypted form, preferably using cryptographically stable hash functions;
 - Protection of the object in which encrypted images of passwords are stored from unauthorized access

- Databases will be regularly backed up once a day to ensure their security and availability
- Server protection:
 - monitoring system;
 - ssh key;
 - password protection;
 - firewall;
 - encryption;
 - control of services;
 - SSL protocol;
 - methods of security of data, databases, accesses, connections;
 - availability of additional data protection tools
- System security testing: Before the system is launched, testing will be carried out to determine the maximum workload that the Platform can withstand without interruptions in its operation

5.5. For persons with disabilities

- Implementing the WCAG standard. The information system will be developed in compliance with web content accessibility standards, ensuring comfortable access for individuals with disabilities

5.6. User interface

- The interface must be adapted to the DSTU standard ISO/IEC 40500:2015 "Information technologies. W3C Web Content Accessibility Guidelines (WCAG) 2.0" The Platform interface will adhere to the web content accessibility standard, ensuring convenient use for all users.
- Support for workstations and mobile devices: The interface will be optimized for both desktop and mobile devices, ensuring comfortable use regardless of the device
- Website design: The website design will follow the guidelines and styling provided at <https://design.gov.ua/ua/>.

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5.7. Testing of general functionality of service. *Languages supported in the system*

- Ukrainian
- English

5.8. Legislation and standards that must be taken into account during project implementation

- Take into account the Law of Ukraine "On Personal Data Protection"
- Resolution of the CMU dated September 1, 2023 No. 930 "Some issues of functioning of temporary accommodation places for internally displaced persons"
- <https://www.w3.org/> – standards for creating web resources.

5.9. User training

- Conduct online video training on information system use for CDTO and responsible representatives of RMA (up to 100 people)

5.10. Project Milestones and deliverables

- **Project setup:** Provision of an Inception Report including detailed action plan for the development, provision, delivery and commissioning of the final product, together with mock-up / plans clearly describing the exact working modality, features; design elements; etc.
- **Delivery of the Minimum Viable Product (MVP):** Completion of the Online Platform, in full compliance with the technical requirements detailed in this TOR. Launch of the web application into industrial operation. Provision of the user Training. Testing and acceptance by the End User.
- **Delivery of final product:** Completion of integration with Trebita system and launch of final version of the web application after Testing and acceptance by the End User.

5.11. Timeframe

- Technical support - 1 year duration.
- The launch of the web application into industrial operation - November-December 2024. The minimum viable product (MVP) is to be launched during this period.
- Completion of development of the final version of the web application - by May 2025.

6.

Milestones, Payment and delivery Schedule			
Milestones	Payment release percentage (%)	Indicative schedule	
1	Project Setup	10%	Within 1 month from the receipt of firm order from UNHCR
2	Delivery of the Minimum Viable Product (MVP)	35%	Within 4 months from the Completion of Milestone #1
3	Delivery of the Final Product	45%	Timeframe to be agreed with the awarded Software Developer from the Completion of Milestone #2
5	Retention for systems defect liability period – 1 year	10%	1 years from the completion of Milestone #3
	TOTAL	100%	

7.

7.1 Technical Support.

The technical support shall include the following tasks for a duration of one (1) year:

- Regular checking and updating of libraries, modules in order to enhance performance, security;
- Bug fixing;
- Infrastructure maintenance;
- Minor changes in interface;
- New minor features development (to be agreed on separately with the owner of the Software)

8.1 *Documentation*

- Development of technical documentation of the information system
- Privacy Policy
- Cookie Policy
- Terms of Service or Terms & Conditions