

TERMS OF REFERENCE
For the development of the eCase
Information System for General Prosecutor
Office

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Abbreviations

GPO	General Prosecutor Office
UNDP	United Nations Development Program
Case file	An electronic dossier comprising information related to a prosecution case.
SRP	State Register of Population
SRLE	State Register of Legal Entities
IDNP	Individual's identification number, unique 13 digits number.
IDNO	Organization's identification number, unique 13 digits number.
Informational object	Virtual reflection of real entities (material and non-material) covering the entity's state and behavior.

A. Background

The United Nations – Republic of Moldova Partnership Framework 2013–2017 voices the collective determination of the United Nations to support Moldova in tackling major development challenges as it implements its vision to be a prosperous and modern European country. The five programming principles of a human rights based approach, gender equality, environmental sustainability, results-based management and capacity development underlie this Partnership Framework.

In the area of democratic governance, justice, equality and human rights, the focus is to ensure that difficult and complex reforms aiming at strengthening government institutions and the justice sector remain on track, and that support is provided to move from policy and legislative formulation to practical implementation.

Existing systems of criminal data collection are outdated and inefficient: every criminal investigation body collects its own criminal justice statistics, while the possibilities for interfacing and exchanging data are limited. The potential of existing data analysis systems to identify trends and solutions for preventing, rather than only reacting to criminal activities, is extremely low. To address this particular deficiency a number of activities meant to change the current situation are being carried out:

- Standardizing procedures for collecting and analyzing criminal statistical data;
- Modernizing statistical data collection;
- Training of pre-trial actors to use electronic systems and tools;

The main objective of this assignment is to develop an automated information system for the record of crimes “eFile” that will enhance the prevention aspect of criminal offences and automate criminal data collection for statistics and analysis.

The Beneficiary of this project is General Prosecutor Office. GPO is an autonomous institution within the judiciary system, which defends the general interests of society, rule of law, rights and freedom, conduct criminal investigations charges and tries cases against a person and/or juridical entity in courts within the law framework.

B. Description of services

1. Project scope and objectives

To build a modern, professional prosecutorial service and to improve the GPO's capacity to function effectively and efficiently, there was identified the need of an information system that will provide functionalities needed by prosecutors in their daily activities and to automate generation of statistical figures by the system.

The system is designed to automate processes within GPO and its territorial offices and serving employees and institutions with which it interacts. The system sets the following goals:

- Provide accurate and up to date information for the prosecutorial employees in their daily activities;
- Provide a secure and reliable collaborative environment regardless of location;
- Provide an efficient document management workflow containing a set of procedures to monitor and notify stakeholders on each major milestone;
- Reduce delays, contradictory messages or actions due to lack of information from decision makers;
- Ensure the transparency of activities and decisions within GPO and its territorial offices;

The Supplier is expected to perform an analysis of types of documents and business processes for target departments within the GPO. The system should focus on the case file concept as well as any other documents that are used to perform the needed work operation within the prosecution process covering information needed to generate reports and statistical figures. Taking into account the sensitive area of prosecution process, a sample of reports F-1E, F-2E and F-P will be given to the selected Supplier.

The main components of the management system are depicted in the picture below.

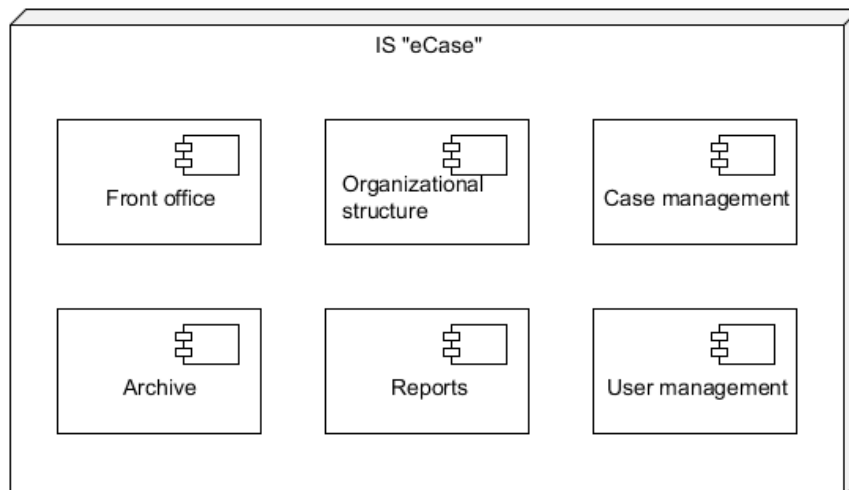


Figure 1: eCase system's components

2. Legal framework

The following is the legal framework related to the development of the eCase system:

- [Constitution of the Republic of Moldova of 29.07.1994;](#)
- [Penal code no. 985 of 18.04.2002;](#)
- [Contravention code no. 218 of 24.10.2008;](#)
- [Civil code no 1107 of 06.06.2002;](#)
- [Law on prosecution no. 294 of 25.12.2008;](#)

- [Law on access to information no. 982-XIV of 11.05.2000;](#)
- [Law on protection of personal data no. 133 of 08.07.2011;](#)
- [Law on information and state information resources no. 467-XV of 21.11.2003;](#)
- [Law on electronic documents and digital signature no. 264-XV of 15.07.2004;](#)
- [Law on registers no. 71 of 22.03.2007;](#)
- [Government Decision on approval of security requirements for personal data while processed by informational systems of personal data no. 1123 of 14.12.2010;](#)
- [Government Decision no. 208 of 31.03.1995 on approval of guidelines of secretariat works related to individual and legal entities' petitions addressed to state enterprises, institutions and organizations of the Republic of Moldova;](#)
- [Government Decision no. 945 of 05.09.2005 on centres for certification of public keys;](#)
- [Government Decision no. 320 of 28.03.2006 approving the regulation on application of digital signatures on the electronic documents of public authorities;](#)

3. Project management

3.1.1 Project Administration Board

The administration board is the project's decision-making body. Its major objective is to ensure project continuity and consistency and its members are responsible for efficient planning and supervision of the project; allocation of financial, human and other resources; agreeing on common project activities and the schedule of activities/work packages; evaluation and confirmation of progress; suggesting preventive and corrective actions, when appropriate.

The administration board includes the project managers from the

- 1) General Prosecutor Office;
- 2) UNDP;
- 3) Supplier.

3.2 Major stakeholder for this assignment

3.2.1 General Prosecutor Office

General Prosecutor's Office of the Republic of Moldova is an autonomous institution within the judiciary system, which defends the general interests of society, rule of law, rights and freedom, conduct criminal investigations and charges and tries cases against a person and/or juridical entity in courts within the law framework. The main tasks of the prosecution are:

- General supervision;
- Monitoring compliance: laws by courts, initiate criminal prosecution and trial support;
- Monitoring compliance with the law enforcement investigation and preliminary inquiry;
- Supervision of legality of security bodies, police and confinement institutions.

Within this assignment the GPO, acting as the Beneficiary of this project will:

- Provide guidance (explanations related to prosecution process) to Supplier during the entire period of eCase system development;
- Conduct testing of the system, jointly with Supplier, at all iterations during system development;
- Provide institutional support to interconnect the eCase system with other information systems to allow for the validation of personal data, importing and verification of relevant data;
- Provide information and explanation of other related information systems used by the GPO;
- Cooperate closely with the Supplier on system development, testing and piloting.

3.2.2 UNDP

The United Nations – Republic of Moldova Partnership Framework 2013–2017 voices the collective determination of the United Nations to support Moldova in tackling major development challenges as it implements its vision to be a prosperous and modern European country. One of the five programs within the framework tackles the justice, equality and human rights reform, through “Support to justice reform in Moldova” project.

UNDP will supervise the development of the eCase system, as well as coordinate all project activities and provide support to project planning and evaluation.

3.3 Monitoring and reporting

During the project the Supplier will provide a detailed progress report on a monthly basis to communicate progress and status of the development, helping to identify strengths and weaknesses of project’s implementation. The report should provide information on the status of delivery of project activities, outputs, and results; as well as information on any actual or potential problems and deviations from the approved work plan and budget.

All reports produced during the implementation of the project shall be provided in Romanian and English, both in hard copy and the electronic version.

All reports produced by the Supplier should satisfy the following requirements:

- 1) Be entirely in Romanian and English;
- 2) Be easily readable with dark print;
- 3) Have every page numbered;
- 4) Have an outline similar to the following:
 - a) Preface;
 - b) Introduction;
 - Purpose;
 - Scope;
 - Definitions, acronyms, and abbreviations;
 - References;
 - Overview of rest of the document;
 - c) Body of Document;
 - d) Appendixes;
 - e) [Index];
- 5) Have a title page, which contains the following items:
 - a) Project Title: Name of the project for which the report was prepared;
 - b) Document Title: Name of the report;
 - c) Abstract: A summary of what the report is all about;
 - d) Document Version: Version of the report;
 - e) Date: Date of the last revision of the report;
 - f) Status: Status of the report. For example, DRAFT or APPROVED;
- 6) Have a preface which includes tables for each of the following:
 - a) People Involved in the Preparation of the Document: List of people who contributed to the development of the report;
 - b) Review List: List of people who reviewed and approved the document;
 - c) Change History: A chronological record of details (Version, Date and Revision Description) about the updates that have been made to the report;
- 7) Have a Table of Contents;
- 8) Have a Table of Figures (where applicable);

- 9) Have a Table of Tables (where applicable);
- 10) Last page of each document shall be blank.

4. Description of the system

Currently the GPO and its territorial offices use “Web document” information system that registers, manages documents and an information system “InfoPG” that collects statistic figures. The above mentioned information systems lack of prosecution case file accountability features, therefore a need of an integrated information system that will track a criminal case through all stages within the prosecution process was identified. The system will provide access to operative information, monitor each particular case and will provide daily information to involved parties.

The system must contain a document management module to facilitate GPO and its territorial office watching over the movement of incoming/outgoing and internal documents according to organization structure, user roles and access rights. The system must provide a workflow within the case management of a case file, which reflects the steps within the prosecution process, such that the system will provide accurate accountability data and will enable the traceability for each particular case. The system must contain a reporting component to provide monthly statistical figures, ad-hoc reports as well as reports on daily activities. Additionally the system must provide an archive component to keep record of closed and/or suspended cases.

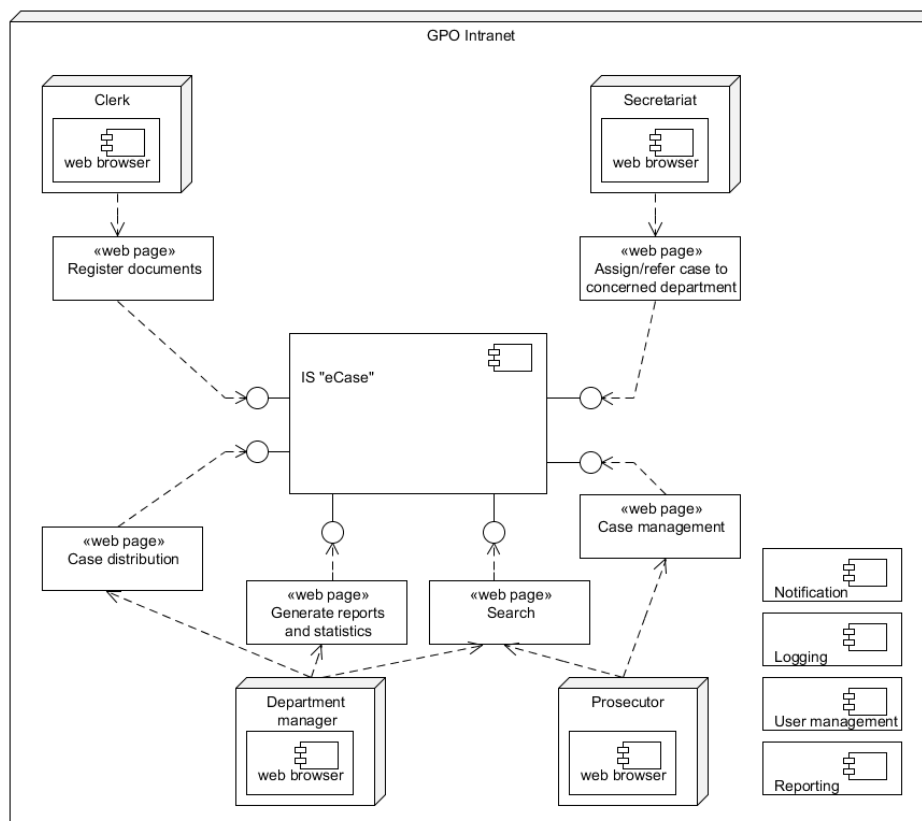


Figure 2: eCase system deployment diagram

The eCase system will have the following key functionalities:

- Register documents within document management;
- Assign/refer case to concerned department;
- Case distribution;

- Generate reports and statistics;
- Search;
- Case management;
- Notification;
- Logging;
- User management.

4.1 User roles

Every individual and/or external system that interacts with the informational system is a user. A typical user is an officer, assistant or manager that has to fulfill a specific task and role. The picture below depicts the human actors of the eCase system and the information systems for data exchange.

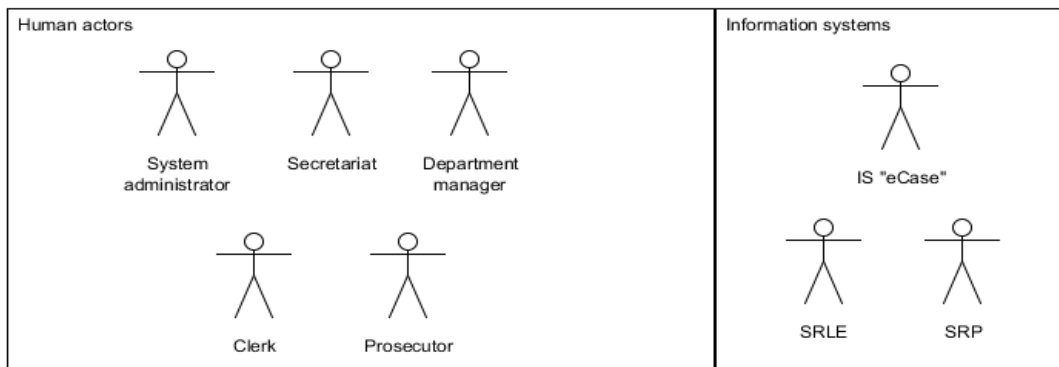


Figure 3: Actors of the eCase system

The human actors of the system are:

- **Clerk** – GPO and its territorial offices employee whose task is to manage incoming/outgoing and internal documents within the chancellery department;
- **Secretariat** - represents an employee within the GPO and its territorial offices;
- **Department manager** – GPO and its territorial offices prosecutor that will have the functionality to distribute prosecution cases within her/his department;
- **Prosecutor** – within the IS “eCase” system represents a case manager;
- **System administrator** – GPO’s employee who will manage the information system and its users;

The information systems actors are:

- **eCase** – to be developed within this assignment;
- **SRP** – State Register of Population;
- **SRLE** – State Register of Legal Entities;
- Other information systems identified during functional analysis.

4.2 Components of the system

4.2.1 Front office

The front office component of the eCase system shall have functionalities and characteristics typical to document management software. The document management software shall handle document management functions that range from capturing, storing, retrieving and distributing documents, images, emails and faxes within the GPO and its territorial offices.

Currently within the GPO’s chancellery there are five (5) working places that receive and register paper based files, petitions other documents related to GPO daily activities. Depending on the type of documents, the system will permit clerks to register documents in the system, label as incoming/outgoing or internal marks, and attach scanned copies to a case. In the case of a new case management the eCase system will assign a unique ID and generate a barcode that can be printed out and attached to the paper based file by the user.

Additionally the document management software will have the possibility to create PDF version of documents received via email and/or other electronic means.

4.2.2 Organizational structure

An organizational structure defines coordination, supervision and tasks allocation that are directed towards the achievement of organizational aims. Prosecution organizational structure consists of self-contained divisions that are coordinated and supervised by the GPO.

The system must reflect the GPO and its territorial offices organizational structure such that it will permit tasks allocation and case referral according to business process within the case management of a prosecution case.

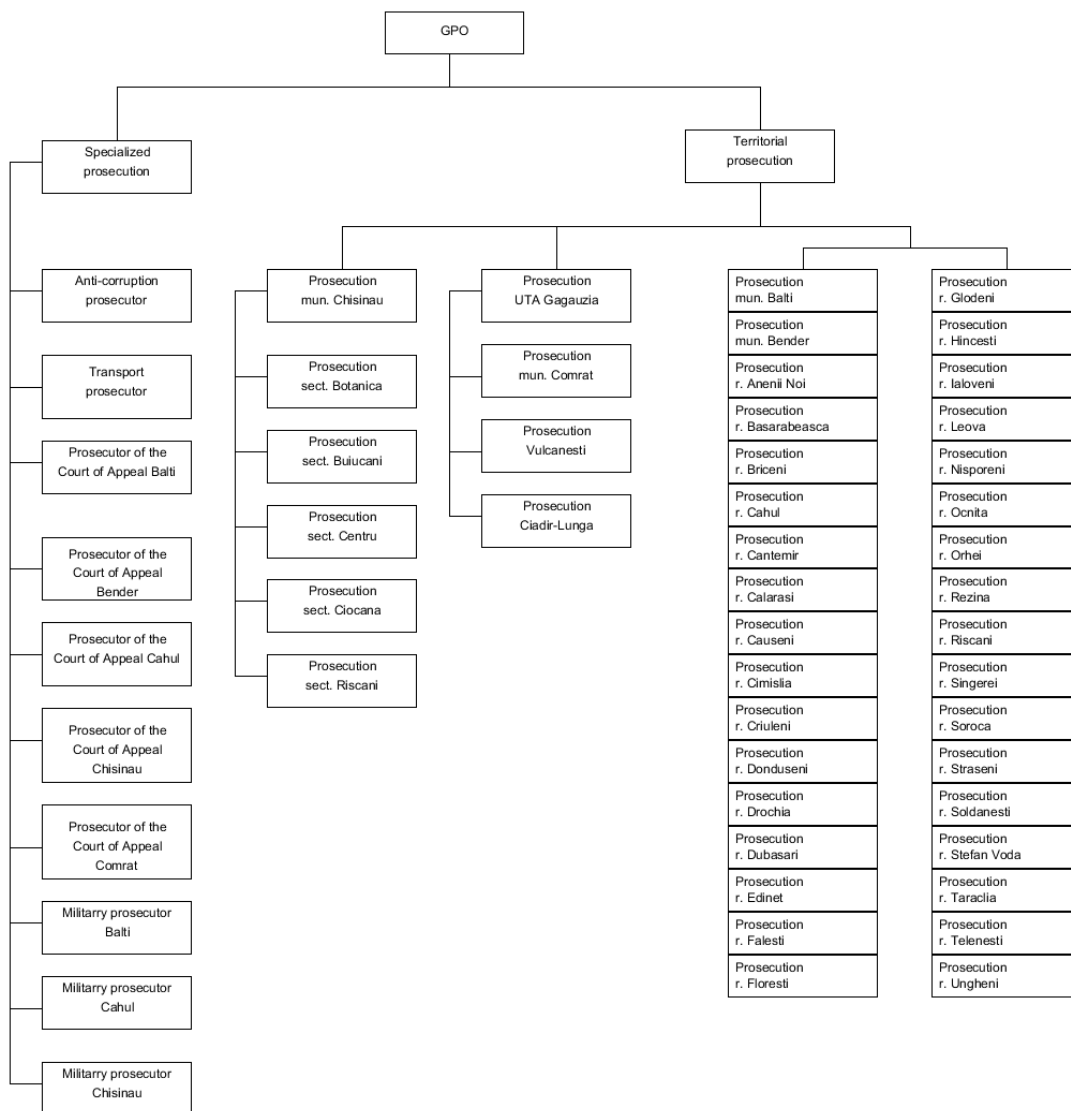


Figure 4: Prosecution organizational structure

4.2.3 Case management of a case file

The case management of a case file within the prosecutor’s business process will ensure better use, management and information sharing for a particular legal case. The system will have a workflow engine that manages information in structured and well defined steps, including actors that act upon it.

The case management workflow shall implement five (5) major milestones within the GPO work operation:

- 1) Documents registration phase;
- 2) Notification phase;
- 3) Prosecution phase;
- 4) Trial phase;
- 5) Judgment enforcement phase.

The picture below sketches the steps within the milestones and actors that act upon each milestone. The Bidder shall treat this workflow as a reference point to get a basic understanding of the prosecution process.

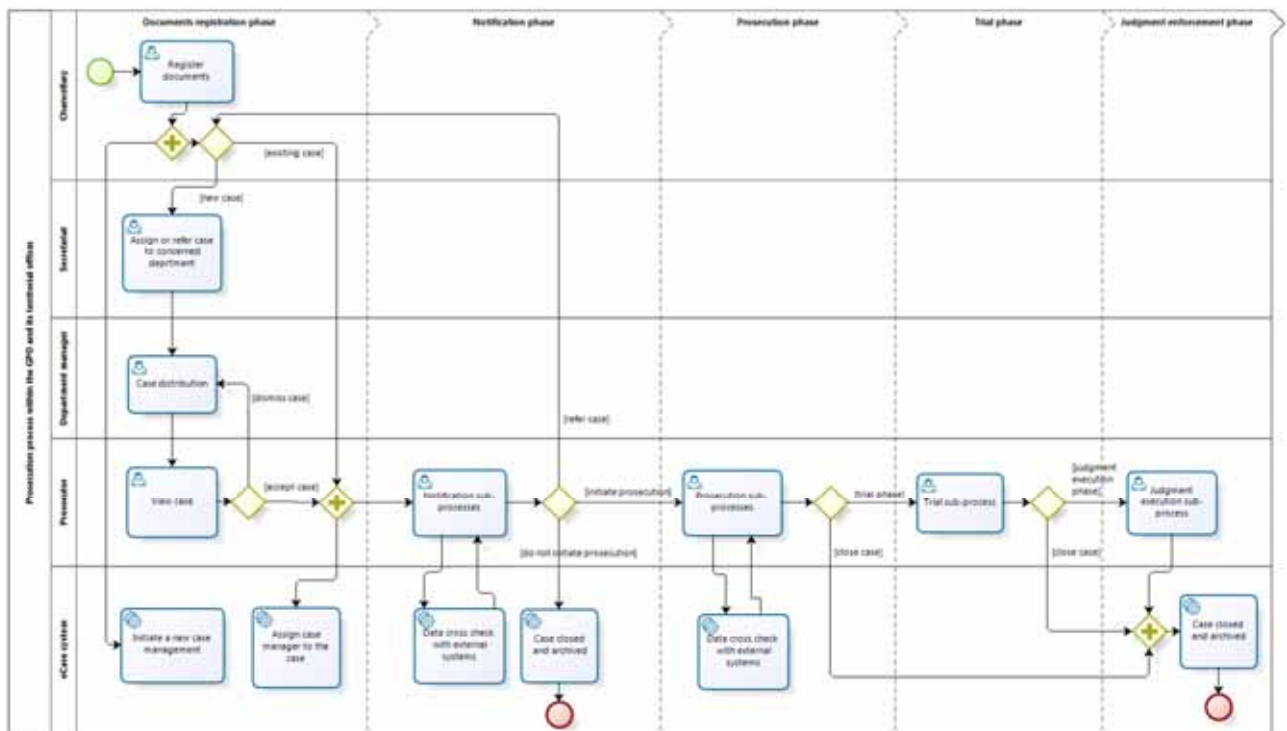


Figure 5: Generic workflow within the GPO and its territorial offices

The eCase system will permit attaching artifacts to each procedural form within the milestones of the prosecution process, such that an authenticated and authorized user can access the artifacts attached. The procedural forms are given within the description of each milestone in the below chapters.

4.2.3.1 Documents registration phase

The system must provide the functionality of a centralized document management system, where users can record documents and receive a case number from the system, either for an existing case or a newly filed one. The system must be able to store electronic images and have a mechanism for input metadata that describes scanned documents. Additionally, a document can be filed electronically via e-mail.

It is foreseen for the future development of the eCase system to enhance the authenticity of electronic documents with digital signature. However at this moment the digital signature functionality is not required by the current assignment, though the proposed solution by the Bidder will permit enhancing the solution with digital signature functionality.

The following use case describes document registration procedure.

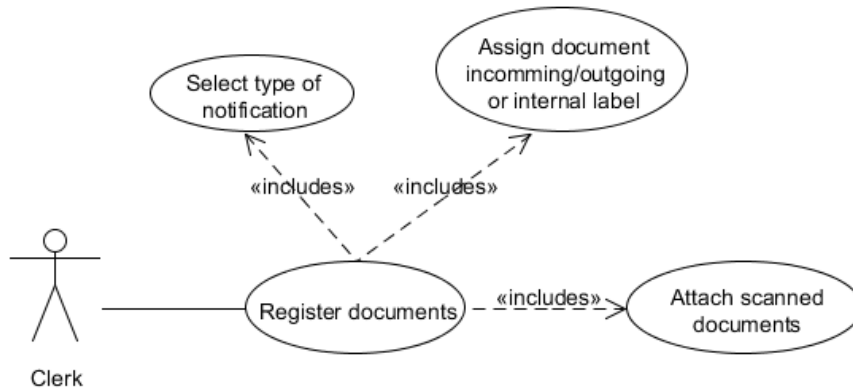


Figure 6: Register documents use case

Attribute	Details
Description	The purpose of the use case is to enable a clerk to register and label documents.
Actors	Users with the role of <i>Clerk</i>
Precondition	User is authenticated and possesses corresponding access level to register documents.
Normal flow	<ol style="list-style-type: none"> 1. User access the front office area of the application. 2. System presents front office screen. 3. User registers a new document. 4. System presents the option for selecting the type of document. 5. User selects the type of document and specifies incoming/outgoing or internal label; 6. System initiates a new case management and generates a unique ID and a barcode. 7. User attaches scanned documents to the case and can print out the barcode to attach to paper based documents. 8. System logs events.

Table 1: Register documents use case description

Assign or refer case to concerned department

Within the GPO workflow, the system will allow users with the role of *Secretariat* to assign or refer a case to concerned department. This functionality will have a form of a working space containing a list of cases and/or documents received from chancellery department.

The system will permit logging all the events related to a case and/or document; to enable the traceability of each particular case and/or document.

5.	Determining the nature of action.
6.	Defendant identification.
7.	Identification of injured person.
8.	Voluntary material compensation before trial.
<i>Administrative case</i>	
1.	Filing a claim or petition
2.	Verification of judicial authorities for violation of laws in the field of administrative offenses.
3.	Advance notification to the authority
4.	Issue ordinance on administrative offense proceedings.
5.	Identification of injured person
6.	Identification of offender
7.	Suspension of the decision on the application of the sanctions provided by Article 25 and 31 ACC
8.	Submission of ordinance to competent authorities to examine the case
9.	Registration of administrative procedure with the competent authority
<i>Penal case</i>	
1.	Notification about the crime or the preparation for committing the crime in the Penal Code (art. 262, CPP 273)
2.	Cancellation of the ordinance of not starting a prosecution under Article 274 CPP
3.	Cancellation of the ordinance of not starting a prosecution

Table 2: Procedural forms within notification phase

4.2.3.3 Prosecution phase

The system will provide procedural forms that characterize the prosecution process. The Supplier will be given the information regarding each information field that is to be present within the forms specified. However the Supplier is expected to perform an analysis of the informational fields that shall be reflected within the required reporting forms.

Procedural forms within prosecution phase	
<i>Penal case</i>	
1.	Initiate prosecution
2.	Referral of penal case to competent authority
3.	Setting the time limit for prosecution of the penal case
4.	Prosecution extension period
5.	Conjunction of penal case
6.	Disjunction of penal case
7.	Recognition of the suspect (article 63 CPP)
8.	Person detention
9.	Discharge detained person
10.	Arrest of the suspect or accused person
11.	Detainee's appeal against preventive arrest warrant
12.	Admission of detainee's appeal against preventive arrest warrant
13.	Prosecutor's appeal against refusal to issue preventive arrest warrant
14.	Admission of prosecutor's appeal against refusal to issue preventive arrest warrant
15.	Extension of preventive detention
16.	Release of person from preventive detention
17.	Submission of the case to prosecutor to indict the suspect under Article 280 CPP
18.	Indict person (art. 281 CPP)
19.	Repair damage caused as a result of the crime
20.	Seized goods value
21.	Notification filed under art . 217 CPP
22.	Suspension of prosecution under art . 287-1 para. 1 , pp 1,2,3,4 CPP

23.	Resuming prosecution after suspension under art . 287-3 CPP
24.	Conditional criminal prosecution art . 510-512 CPP
25.	Resumption of conditional suspension
26.	Remove the person from criminal prosecution
27.	Dismissing a criminal case (art. 286 CPP)
28.	Termination of prosecution
29.	Resuming after cessation of criminal prosecution , filing and dropping of the prosecution
30.	Layout investigations in order to search the accused
31.	Return of the case to investigation authority for further investigation (art. 292 CPP)

Table 3: Procedural forms within prosecution phase

4.2.3.4 Trial phase

Procedural forms within trial phase of the prosecution process described in the table below.

Procedural forms within prosecution phase	
<i>Civil case</i>	
1.	Filing civil action by the prosecutor to the court under article 71
2.	Case registration at court
3.	Case examination
4.	Appointment of civil proceedings for review and adopted decision
5.	Pronunciation of justice in the court of first instance
6.	Submitting prosecutor's appeal in the first instance
7.	Pronunciation of justice in the court of first instance about prosecutor's appeal.
8.	Other party submitted appeal in the first instance.
9.	Pronunciation of justice in the court of first instance about other party's appeal.
10.	Submitting prosecutor's appeal in the Court of Appeal.
11.	Pronunciation of justice in the court of Appeal about prosecutor's appeal.
12.	Other party submitted appeal to Court of Appeal.
13.	Pronunciation of justice in the court of Appeal about other party's appeal.
14.	Submitting prosecutor's appeal to the Supreme Court.
15.	Pronunciation of justice in the Supreme Court about prosecutor's appeal.
16.	Other party submitted appeal to the Supreme Court.
17.	Pronunciation of justice in the Supreme Court about other party's appeal.
<i>Administrative case</i>	
1.	Case examination and decision pronouncement
2.	Registration of complaint filed against the decision
3.	Examination of complaint
4.	Submission of protest against the decision
5.	Protest examination
6.	Judgment or court decision that examines the complaint or protest
7.	Submission of complaint or protest appeal against the decision
8.	Examine the protest in appeal process
9.	Decision of court of appeal
10.	Protest during appeal against decision of extrajudicial authorities
11.	Examine the protest during appeal at the extrajudicial authority
12.	Progressing of protest in appeal against final decision of judicial authority
13.	Examine the protest during appeal at the extrajudicial authority
14.	Progressing approach in the interest of law under Article 283-1 ACC
15.	Court decision
<i>Penal case</i>	
32.	Preparing bill of indictment
33.	Sending a penal case to court
34.	The preliminary hearing

35.	Postponement of hearing
36.	Details of the plea bargain agreement
37.	Deliberations sentence
38.	Redaction of sentence
39.	Sending sentence
40.	Attacking sentence
41.	Sending the case to hierarchically-superior court with appeal or recourse to higher court
42.	Pronouncing the decision in appeal
43.	Sending the appeal to the Supreme Court
44.	Supreme Court Decision

Table 4: Procedural forms within trial phase

4.2.3.5 Judgment enforcement phase

The majority of procedure forms shall have informational fields containing narrative description of the judgment enforcement phase. However the Supplier shall perform an analysis the verify statistic figures from reporting forms F-1E, F2-E and F-P are covered by the required information fields within judgment enforcement procedure forms.

Procedural forms within judgment enforcement phase	
1.	Sending court decision to execution authority
2.	Registration of court decision at execution authority
3.	The execution of court sentence
4.	The transfer of the enforcement body injury plaintiff or party passion
5.	Prosecutor's actions in the case of execution failure of the court decision or other violations of law
6.	Review request submission the General Prosecutor in accordance with art. 447-C CPC
7.	Submission of recourse action by the General Prosecutor under art. 17 of Law no. 353/28.10.2004 on the Government agent in the European Court

Table 5: Procedural forms within judgment enforcement phase

4.2.4 Archive

The eCase system must provide archive functionalities such that closed cases are than archived and kept in a secure manner by the system. The archive component must enable storage, management and retrieval of archived cases and documents. The system will have a scheduling functionality to purge outdated cases as defined by system administrator.

4.2.5 User management and system administration

The user management component is a backend for user administration and generic management functionalities that can be used for authentication purposes and to manage the users, groups, roles, permissions and permission sets.

Main functions of the component must comprise:

- 1) Registration;
- 2) Authentication;
- 3) Authorization;
- 4) Logging;
- 5) Administration of users;

The system administrator will have the following functionalities related to intranet user accounts:

- 1) Create a user account;
- 2) Modify user accounts;

- 3) Suspend/activate user accounts;
- 4) Assign a role to a user and/or group of users;
- 5) Assign the authorization level.

The authorization functionality of a role must permit setting the following rights:

- 1) Create objects;
- 2) Read objects;
- 3) Update objects;
- 4) Delete objects.

The system administrator user will also have the following functionalities:

- 1) Create templates for reporting purposes;
- 2) Manage the templates of reports and statistics;
- 3) Manage templates for all types of documents identified during development (e.g. petition, audience minutes, internal documents, ordinance, etc).
- 4) Administer the eCase system' nomenclatures;
- 5) View logs of events.

The system administrator will be able to create predefined templates, using a report designer that will enable selecting raw data fields from the database of the eCase system. Based on these templates, the eCase system will generate reports enabling selection of the formats described in section *4.2.6 Reports*.

4.2.6 Reports

The reporting functionality is a key aspect of the system that will transform raw data into meaningful and useful information. The standardized reporting forms shall merely reflect the milestone of a case management and prosecution sub-processes built around a case file. Thus the reporting service of the system shall have a visual tool to design reporting templates that will be used to generate and export reports. Within this assignment the Supplier will develop the standardized reporting forms F-1E, F-2E and F-P.

The system will permit authenticated and authorized user to generate and export reports in a predefined data format. Taking into consideration the tabular nature of the reporting forms, the Beneficiary is willing to export reports into minimum two (2) file formats:

- 1) PDF format;
- 2) Microsoft Excell format;

The following picture depicts the export reports use case; following table than describes the flow of actions between a user and the system.

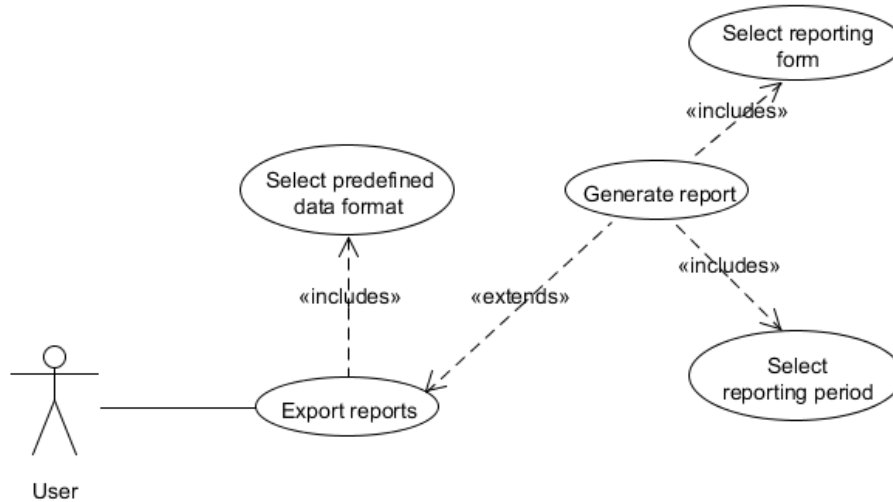


Figure 8: Export reports use case

Attribute	Details
Description	The purpose of the use case is to enable a user to generate and export reports in predefined file formats.
Actors	Any authenticated and authorized actor.
Precondition	User is authenticated and posses corresponding access level to export reports.
Normal flow	<ol style="list-style-type: none"> 1. User access the reporting area of the application 2. System presents reporting screen 3. User selects the desired reporting form within the list of forms 4. System presents the option for selecting the reporting period as well as type of reporting period either[monthly, cumulative and/or specifying a period from start date to end date] 5. User selects predefined data formats 6. System generates report as defined by the selected report form, and presents the generated report on the screen. 7. User can download the generated file. 8. System logs use case events.

Table 6: Export reports use case description

Besides standardized reporting forms, the report designer within the system shall be flexible enough so that the system administrator can create new templates; add/delete data fields’ fetched form the database.

4.2.7 External information systems

The eCase system must be integrated at least with following state registers:

- 1) State Register of Population (SRP);
- 2) State Register of Legal Entities (SRLE);

The Supplier is expected to perform an analysis of informational fields needed by the eCase system to be imported from the state registers taking into consideration the domain model in 5 *Concept of the case file (electronic dossier)*.

The minimum information fields to be invoked from the state registers are described in the table below:

	State register	Information fields
1.	State register of population	1) IDNP; 2) First name; 3) Last name; 4) Sex; 5) Date of birth; 6) Place of birth; 7) Nationality; 8) Identification documents; 9) Address.
2.	State register of legal entities	1) IDNO; 2) Organization full name; 3) Date of registration; 4) Date of liquidation; 5) Organizational legal form; 6) Address of organization; 7) List of administrators; 8) List of founders; 9) List of branch offices;

Table 7: Information fields from state registers

5. Concept of the case file (electronic dossier)

The case file concept basically describes an electronic dossier that reflects the paper based dossier within the prosecution process. The case file is the core data object that reflects the prosecution process and contains information regarding prosecution steps, its statuses, type of offence other documents and description that characterize a particular prosecution case.

Each prosecution case is based on respective articles from legislation, thus the Supplier will implement related nomenclatures within the eCase system so as to enable the reference functionality indicating articles from legislation when initiating a prosecution process. The Supplier will be given access to actual system that posses such nomenclatures; an analysis would be needed in order to import those nomenclature and interconnect with the new eCase system.

The following picture depicts the case file domain model as seen by the Beneficiary; however the Bidders shall treat this model only as a reference to better understand the assignment and elaborate successful bids.

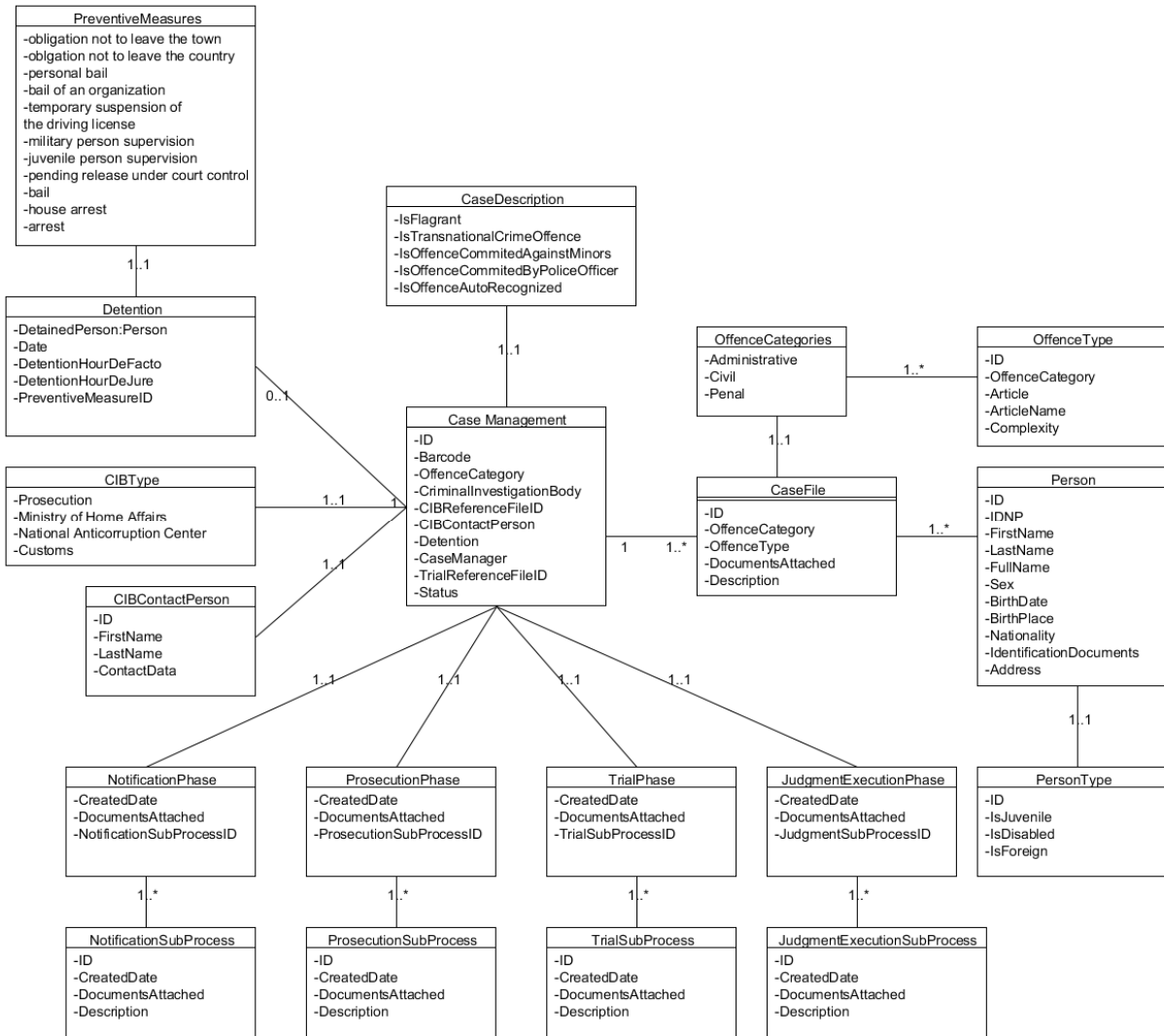


Figure 9: Case file domain model

6. Hardware and telecommunication infrastructure

The eCase system will operate on equipment maintained by the GPO within its premises. The Supplier will be given additional information about the available hardware equipment, however at this moment the GPO proposes the following equipment:

- 1) HP ProLiant DL380G6 server;
- 2) 2 x 72Gbytes in RAID storage space.

GPO and its territorial offices are securely interconnected in a virtual private network, 16 of territorial offices are connected with 50 Mbits/s to the GPO the other 33 offices are connected with 8Mbits/download and 1Mbit/upload internet bandwidth.

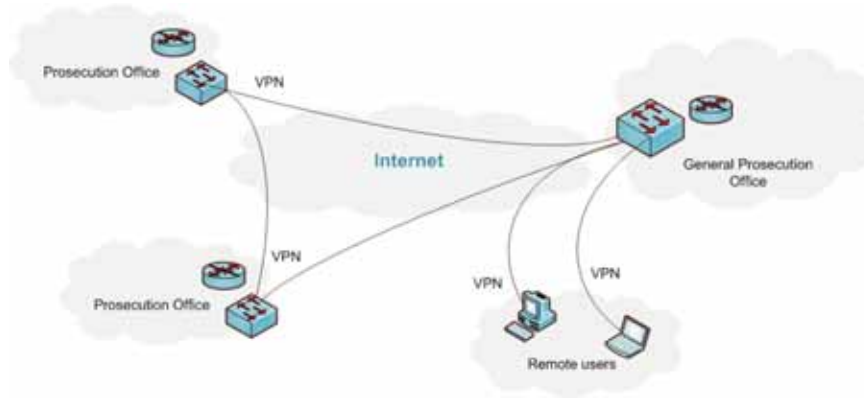


Figure 10: GPO virtual private network

7. Selected company profile

The bidders will meet the following minimum requirements:

- Minimum five (5) years of solid experience in design and develop ICT solutions of similar nature and complexity.
- Experience in developing ICT information systems.

The Bidder shall provide following information within its offer:

- Detailed description of the company;
- Copy of registration documents;
- Company portfolio, specifying similar implemented projects;
- Descriptions of similar ICT solutions;

7.1 Key personnel

The Bidder shall describe the proposed key personnel taking into consideration following positions:

- Project manager;
- System architect;
- Business analyst.

Minimum requirements for the Project manager position:

- University degree in ICT field, with at least five (5) years of professional experience, specifically in project management;
- Working knowledge of Romanian and English are essential;
- Proven professional experience in project management by conducting at least three (3) projects preferable in IT development.
- Recognized certificates in project management will be an advantage.

Minimum requirements for the System architect:

- University degree in ICT field, with at least five (5) years of experience in system architecture;
- Working knowledge of Romanian and English;
- Proven experience as system architect in ICT projects developing ICT solutions.
- Recognized certificates in the field of technologies proposed within the offer will be an advantage.

Minimum requirements for the Business analyst position:

- University degree in ICT field, with at least three (3) years of experience in requirements engineering and business analysis in ICT projects;
- Excellent knowledge of Romanian and Russian;
- Proven professional experience in similar information development as Business analyst.

8. Risk mitigation, monitoring and development of the eCase system

The Beneficiary recommends developing the eCase system by using an iterative development methodology that suggests developing prototypes of the informational system adding the basic functionalities incrementally during the project implementation.

The iterative development methodology suggests a cyclic development model facilitating the control on system development by developing prototypes to diminish the risk of functional requirements that were not defined or conceived at the functional analysis stage. Every iteration aims to develop progressively new system segments which are further integrated step by step with the functionalities developed earlier and tested jointly with Beneficiary.

During each iteration cycle, the Supplier jointly with the Beneficiary will test the new functionalities that were developed and will revise/adjust the functionalities to be yet developed aiming at creating a common vision of the features of the eCase system.

C. Technical specifications

This chapter contains the list of Mandatory requirements (M), which shall be met by the Bidder. Not meeting this requirement leads to disqualification of the proposal;

Nr.	Requirement	
<i>General Requirements</i>		
1.	The eCase system must be developed using an off-the-shelf solutions allowing for further customization. The Bidder will propose an off-the shelf solution and/or a suite of instruments to fulfill at least mandatory technical requirements within its offer.	M
2.	The eCase system will be used by 800 users. The Bidder shall take into consideration the number of licenses if any. The Bidders shall indicate the total cost of the licenses, operational licenses and other costs including system operation licenses cost.	M
3.	The Bidder will indicate the licensing cost of each software component within the proposed solution, as well as type of license and its renovation period if need be.	M
4.	The proposed solution will permit enhancing the eCase system with digital signature.	M
5.	The eCase system will be deployed on current hardware infrastructure within the GPO premises.	M
6.	The eCase system shall guarantee data integrity, accountability and accessibility and prevent any altering, damages and unauthorized access to the system data.	M

7.	The eCase system shall allow for further expansion and additions of new functions or improvements.	M
8.	The eCase system shall be compatible with most of the popular browsers (at least with the latest versions of Chrome, Firefox and Internet Explorer).	M
9.	The project implementation shall not take more than six (6) months.	M
<i>Functional Requirements</i>		
10.	User interface of the eCase system will be available in Romanian language.	M
11.	The eCase system will permit translation of the user interface in other languages.	M
12.	The eCase system will allow entering information in Latin and Cyrillic alphabets, including Romanian diacritics (UTF-8 character representation).	M
13.	Depending on the device used to access the eCase system: 1) PC (Web browser); 2) Tablets; 3) Mobile phone (mobile web browser) the eCase system shall customize the user interface according to the device's display size (responsive design).	M
14.	The eFile document management software must: 1) Permit attach/remove documents; 2) Permit documents multi-versioning; 3) Prevents deletion of documents, except following a pre- defined deletion procedure.	M
15.	The eCase system will permit to scan, attach and tag documents as: 1) Incoming 2) Outgoing; 3) Internal; 4) Other classifier. according to 4.2.3.1 <i>Documents registration phase</i> section.	M
16.	The eCase system will have a search functionality including but not limited to: 1) Case management number; 2) Case file number (dossier number); 3) Case manager; 4) Criminal investigation body; 5) Textual keywords within the description fields of a case; 6) Article number from Civil, Administrative or Criminal codes; 7) A combination of date, period and department; 8) Other search criteria defined together by the Beneficiary and the Supplier.	M
17.	The eCase system shall have information dissemination functionality, usually KPI indicators that will be generated and exchanged automatically with Governmental portal http://date.gov.md .	M
18.	The eCase system will permit the evidence of transmitted / returned paper based file under examination in various state courts.	M
19.	The eCase system will monitor and notify the actors involved in a prosecution case via email or any other means agreed with the Beneficiary: 1) The system will notify cases that are being examined more than	M

	<p>three (3) months;</p> <p>2) The system will keep track of examination period that is about to end;</p> <p>3) Cases mandatory to be examined in an immediate period;</p> <p>4) Other periods depending on offence type and category.</p> <p>The period of examination and notification for each case type is to be set up by the system administrator.</p>	
20.	The eCase system must have a workflow engine, implementing the proposed prosecution process workflow according to <i>Figure 5: Generic workflow within the GPO and its territorial offices.</i>	M
21.	Each milestone related to prosecution process within the workflow will have procedural forms depending on the case category as described in <i>0 Case management of a case file</i> chapter and its sub- chapters.	M
22.	Each procedural form within all prosecution milestones will contain mandatory information fields to be filled in by the case manager, such that all necessary figures from reporting forms F-1E, F-2E and F-P are covered.	M
23.	The case manager can enter information within the procedural forms only within one (1) milestone at a time. The system will prevent modification of previous milestone' procedural forms when a new milestone is started.	M
24.	The eCase system must permit to attach minutes from audience to an existing case or open a new case based on minutes.	M
25.	The eCase system must permit the creation of new types of documents keeping an internal documents type classifier.	M
26.	<p>The workspace of eFile users will have the following minimum user interfaces:</p> <p>1) <u>Clerk-</u></p> <p>a) Register documents interface;</p> <p>b) Search cases and/or case file (electronic dossier);</p> <p>c) Upload documents into the eCase system;</p> <p>d) Other interfaces defined during functional analysis.</p> <p>2) <u>Secretariat –</u></p> <p>a) Search interface;</p> <p>b) Documents referral interface;</p> <p>c) Other interfaces defined during functional analysis.</p> <p>3) <u>Department manager –</u></p> <p>a) Search interface;</p> <p>b) List of cases for distribution;</p> <p>c) Interface for case distribution (<i>Figure 7: Case distribution scenario</i>);</p> <p>d) Other interfaces defined during functional analysis.</p> <p>4) <u>Prosecutor–</u></p> <p>a) Search interface;</p> <p>b) Interface containing the list of accepted cases;</p> <p>c) Interface containing phases and information fields as described in <i>0 Case management of a case file.</i></p> <p>d) <i>Case management of a case file.</i></p> <p>e) Other interfaces defined during functional analysis.</p>	M
27.	The eCase system shall be interfaced with the external informational systems stated in section 4.2.7 <i>External information systems.</i>	M

28.	The Supplier will import into the system classifier related to prosecution process. The minimum nomenclatures to be imported are: 1) Administrative units classifier; 2) Court cases complexity degree classifier (Council of Magistrates decision no. 149/11 of 29 March 2011); 3) Other classifier discovered during analysis.	M
29.	During the prosecution process the system will permit referencing to articles within: 1) Administrative code; 2) Civil code; 3) Penal code; 4) Other legislative acts. according to chapter 5 <i>Concept of the case file (electronic dossier)</i> .	M
30.	The eCase system will prevent completion of a milestone within a case management and/or closing a case without entering following mandatory information fields for the penal prosecution process: 1) Person sex; 2) Person age; 3) Person disability type and degree; 4) Other mandatory fields discovered during functional analysis.	M
31.	All cases that are closed will be kept in system's electronic archive. The system shall have an erasing mechanism of old cases and documents following a pre-defined procedure.	M
<i>System Administration Requirements</i>		
32.	The eCase system shall allow for the management of users by: 1) Creating users; 2) Grouping users; 3) Assigning roles; 4) Specifying the authorization rights. according to 4.2.5 <i>User management and system administration</i> section.	M
33.	The system administrator will have the functionality to manage reporting templates using a visual reporting designer.	M
34.	The system will provide the audit functionality to system administrator that will be capable an audit trail minimum comprising the following: 1) Each action performed; 2) The user who performed the action; 3) Date and time of action.	M
<i>Requirements to Reports, Statistics and Other Documents</i>		
35.	The eCase system must have the functionality to generate and export reports and statistics according to section 4.2.6 <i>Reports</i> .	M
36.	The Supplier will develop templates of the reporting forms F-1E, F-2E and F-P. The report designer will permit to create reports other than reporting forms F-1E, F-2E and F-P.	M
37.	Report generation for the F-P form will have an internal control logic that verifies the correctness of computed statistical figures. The Supplier will be given information regarding the business rules.	M
38.	The eCase system will permit to generate monthly, cumulative and/or specifying from start date to end date statistical reports.	M

<i>Requirements for the Development Methodology</i>		
39.	The iterative methodology or other methodologies from the <i>Agile Software Development</i> group (http://en.wikipedia.org/wiki/Agile_software_development) based on iterations and increments shall be used to develop the eCase system.	M
<i>System Performance Requirements</i>		
40.	The eCase system must support at least 500 concurrent sessions.	M
41.	The eCase system architecture shall be service-oriented (SOA). Such that eCase system can be further developed and integrated with other information systems within the GPO.	M
42.	The system must be able to display the search results of a simple search within <5 seconds> and a complex search (combining four (4) or more keywords) within <10 seconds> regardless of number of files and records stored in the eCase system.	M
<i>Testing and Quality Requirements</i>		
43.	The source code of the eCase system shall be accompanied by comments, well structured and with suggestive names for variables.	M
44.	Supplier shall develop the eCase system using the principles and guidelines of Web Content Accessibility Guidelines (WCAG 2.0). More specifically: 1) Percipience; 2) Operability; 3) Intelligibility; 4) Robustness.	M
45.	The Supplier shall test the security of the eCase system according to OWASP Top 10 vulnerabilities 2013.	M
46.	The Supplier shall run the performance testing in terms of: - load testing; - stress testing. The Supplier will elaborate and present to the Beneficiary the report of performance testing outputs.	M
<i>Security Requirements</i>		
47.	The eCase system will provide minimum five (5) level of access, from unrestricted access (highest level) to very limited access (lowest level).	M
48.	The eCase system will permit assigning access level to a group of users by the system administrator.	M
49.	The eCase system will have the functionality of defining classes of documents e.g. notification, petition, audience, ordinance, others and assign respective authorization level to access these documents by users.	M
50.	The eCase system shall permit to system administrator to provide access to documents on a time basis by defining a time period.	M
51.	The eCase system will provide search results based on user access level, thus showing only those objects that are within the user access level.	M
52.	The eCase system must have the functionality to suspend and reactivate user accounts.	M
53.	The eCase system shall generate reports according to user access level. To be defined by security policies by the system administrator.	M

54.	<p>The eCase system shall guarantee full data storage by using back-up mechanisms for database and shall guarantee data integrity implementing following mechanisms:</p> <ol style="list-style-type: none"> 1) The eCase system shall apply filters and/or other restrictions in relation to the type of entered information and information field mandatory status, so as to ensure integrity of data that populated the system; 2) The data entered into the system may not been edited, damaged or deleted without authorization; 3) Any unauthorized attempt to edit data shall be logged with further possibility to audit. 	M
<i>Training</i>		
55.	Training must be conducted in Romanian language, however it is expected that the trainers are able to communicate in Russian language.	M
56.	Supplier will conduct “Training of trainers” sessions of one (1) person so that she/he can transfer her/his knowledge to other colleagues.	M
57.	Supplier will conduct training session of GPO’s employees (50 persons) to cover business functionality of the eCase system.	M
58.	Supplier will train the system administration (2 persons) on how to use the system administration functionalities, user management, template management and other matters and administrative functionalities of the eCase system.	M
<i>Maintenance requirements</i>		
59.	The Supplier will provide warranty and technical support during the 24 months after the acceptance of the eCase system by the Beneficiary.	M
60.	<p>The Supplier will establish a Help-Desk service to provide support and guidance to the Beneficiary during working days.</p> <p>The Help-Desk will satisfy following minimum requirements:</p> <ol style="list-style-type: none"> 1) Can be reached at national landline number within Republic of Moldova; 2) Can be reached via email; 3) Communication language is Romanian; 4) The response time will not exceed eight (8) business hours for regular troubleshooting and not more than seventy-two (72) hours in case of major complex issues. 	M
<i>Deliverables</i>		
61.	The Supplier will deliver the complete source code of the accepted solution for the eCase system and software components necessary to compile and/or install the solution.	M
62.	The Supplier will provide training sessions according to section 9.4 <i>Training</i> .	M
63.	Supplier shall prepare and deliver to GPO user guidelines in Romanian language.	M
64.	Supplier shall prepare and deliver to GPO administrator’s guidelines in Romanian language.	M
65.	Supplier shall prepare and deliver system installation and configuration guidelines (to cover at least installation and configuration of the application and related infrastructure, initialization of system services, other issues related to the system management) in Romanian language.	M

66.	Supplier shall prepare and deliver the technical design with detailed information about the solution's architecture, the conceptual and physical model of data, all the system's components and their interaction, principles of development of user and administrator interfaces, users and their roles, the types of implemented documents, informational security principles, peculiarities of the legislation and the resources necessary for the operation of the system that will support performance of all the development/acceptance activities.	M
67.	Supplier shall prepare and deliver the system's architecture documentation with description of models in UML language with sufficient level of detail for architecture.	M
68.	Supplier will deliver elaborated training materials in electronic version.	M

D. Implementation schedule

9. Tentative implementation plan

The following table describes a tentative plan to develop the eCase system

	Implementation stages	Installation (weeks from effective date)	Acceptance (weeks from effective date)
1.	Preparation stage	--	W2
2.	Development stage	W2	W18
3.	Deployment stage	W18	W21
4.	Training	W21	W24

9.1 Preparation stage

	Implementation sub stages
1	Preparation stage
1.1	Definition of the project goal
1.1.1	Process modeling
1.1.2	Review of system's functional and non-functional requirements
1.1.3	Identification and management of project risks
1.2	Development planning
1.2.1	Identification of system components

9.2 Development stage

	Implementation sub stages
2	Development stage
2.1.	Design review
2.2	Iteration #1
2.2.1	Review of the functional requirements, front office, document registration, prosecution workflow, case file (electronic dossier), organizational structure, administrative functionalities.
2.2.2	Implementation
2.2.3	Testing
2.2.4	Evaluation
2.3	Iteration #2
2.3.1	Review of the functional requirements, notification phase, procedural forms, and information fields to cover reporting forms F-1E, F-2E and F-P.
2.3.2	Implementation
2.3.3	Testing
2.3.4	Evaluation
2.4	Iteration #3
2.4.1	Review of the functional requirements, prosecution phase, procedural forms, and information fields to cover reporting forms F-1E, F-2E and F-P.
2.4.2	Implementation
2.4.3	Testing
2.4.4	Evaluation
2.5	Iteration #4
2.5.1	Review of functional requirements, trial and judgment enforcement phase, procedural forms, and information fields to cover reporting forms F-1E, F-2E and F-P.
2.5.2	Implementation
2.5.3	Testing
2.5.4	Evaluation
2.6	Final integration
2.6.1	Final integration of functionalities.

9.3 Deployment stage

	Implementation sub stages
3	Deployment stage
3.1	Finalization of the user and system administrator guidelines.
3.1.1	Testing of the eCase system on the production environment.
3.1.2	Testing of system security.
3.2	Adjustment of the eCase system according to Beneficiary's feedback
3.2.1	Final delivery of the eCase system.
3.3	Operational acceptance of the system.

9.4 Training

	Implementation sub stages
4	Training
4.1	Train the trainers session
4.2	GPO's employee training on business functionalities
4.3	Training of system administrators