



**Terms of Reference**  
**Hiring a firm for**  
**development, enhancement & maintenance, e-court platform including Data Archiving system**  
**(Executive Magistrate court, certificate court, Mobile court)**



**Aspire to Innovate**  
**Government of Bangladesh**



## **1. Introduction**

The UNDP funded Aspire To innovate (a2i) Programme under Information and Telecommunication Division has been accelerating the government's efforts to carry the required services to the door-steps of the people for the last few years and has achieved significant successes in drawing national attention and gaining much-sought-after leverage in influencing ICT related policies with great impact on national development. The overall objective of a2i is to provide support in building a digital nation through delivering services at the citizen's door-steps. The program aims to improve quality, widen access and decentralize delivery of public services to ensure responsiveness and transparency. Working components of this project are (a) Strengthening existing e-services and launching a second generation of integrated, inter-operable e-government applications, (b) Sensitizing government officials, training service providers and expanding digital literacy among the general public, (c) Forging strong policy and strategy links to ensure implementation of needed legal and regulatory changes in support of the project and (d) Promoting innovation in the delivery of e-services.

To enhance second generation e-service integration platform by forming an interoperable ICT backbone for Executive Court, a2i has already developed electronic system for e-Court (Executive Magistrate court, certificate court, Mobile Court) system including citizen complain, case management and Monitoring. According to the power of Ordinance No. 1 of 2020 titled as "Use of Information and Communication Technology by Courts Ordinance, 2020", a2i would like to take an integrated approach where focused area would be virtual case procedures, information exchange between citizens and magistracy, monitoring and access to the progress of cases, archives and proceedings in different types of executive courts to address access to magistrate irrespective of internal procedure complexity.

Executive courts have been playing significant role in preventing offenses and to establish law and order in the society through ensuring consumer rights, preserving human rights and environment, The public demands recovery act,1913 (PDR Act), executing the criminal case (The Code of criminal procedure,1898). The necessity was perceived long ago to draw linkage between citizens and the Court with an aim to cooperate the law-enforcing authority carrying out their duties. Many countries have been implementing Information Technology in the functions of Courts in order to render services to the citizens effectively, ensure transparency and accountability in work and to establish good governance.

## **2. Objectives:**

The overall objective of the assignment will include the followings:

- To develop the general certificate court, executive Magistrate court according to the collected requirements from the stakeholders
- To enhance existing executive magistrate court, certificate court, Mobile court system in such a way that it can act as a single point of access of all information and services related to executive magistrate court and certificate court activities.
- To design and develop data archiving platform so that citizen can easily access information along with relevant services from the system
- To establish mobile first strategy in e-court platform, by developing mobile application for both android and iOS platforms which will be introduced as a e-court platform for information and service access gateway.
- To achieve the highest level of user satisfaction by ensuring smooth operation with quality maintenance and proactive support services for e-court platform (Executive Magistrate court, certificate court & Mobile court)



- To analyze and implement relevant and necessary feedback coming from the user end
- To ensure growth and scalability of the system so that it can be operated easily during development, modification, extension.
- To have an enhanced digital payment and future incorporation to any available payment system.
- To ensure enhancement of API platform for easier integration of required services and systems.

### 3. Scope of work

The firm will develop e-Court Platform along with the associated solution development/support. Major components of this assignment are as follows:

1. e-Court Platform includes the Executive Court are the DM (District Magistrate) Court, ADM (Additional District Magistrate) Court, Certificate court, Executive Magistrate court, Mobile court etc. We will consider DM, ADM Court, Certificate court, Executive Magistrate, Mobile court under this scope. Selected firm will be responsible for development, enhancement, entry data, implementation, support and maintenance of e-Court Platform in All (64) districts of Bangladesh.
2. Design and development of a Virtual Executive magistrate Court system illustrated in Figure 1 will, in the long run, accommodate all technology solutions for electronic Executive court.
3. To enhance existing executive magistrate court and mobile court, and develop certificate court system in such a way that it can act as a single point of access of all information and services related to executive magistrate court and certificate court activities.
4. This System should have ***portability*** to connect all Executive courts along with relevant geographical information, hierarchical relationship among courts, organogram of all courts, and horizontal and vertical integration among courts.
5. Study and analysis of mentioned Executive courts to identify overall processes and preparation of a Business Requirement Specification (BRS).
6. Analyze Data and Process interface requirements, integration requirements and develop entity relationship, design database and prepare Software Requirements Specification (SRS), Software Design Document (SDD), DFD, Process Map and necessary design documents for the developed solutions along with Test Cases.
7. Design and develop a highly scalable web-based and mobile responsive software application for conduction executive court comprising of video conferencing Tool under a Multi-tier/N-tier application model and also compatible with high-tech processing, run in the secured cloud infrastructure environment as with the articulated Proposed Modules.
8. Prepare technical documentation for configuring video conferencing Tool (Microsoft Meet/Zoom/Boithok) and assist user to setup conference and acquire data
9. System should have provision of storing data automatically from video conferencing tool.
10. Identification and development of required Application Programming Interface (API) for better integration of this software to different related solutions in place and provisioning the same for those of the future. This will include integration of compliance of this software with other Systems.
11. For administrative filing, firm needs to develop and enhance api/service integration mechanism with this software to communicate with a2i's existing eNothi system whenever it is necessary.



12. System should have the provision for “Single sign on” from a single platform to different court system.
13. Create a provision so that Online Payment Gateway can be integrated into the system. It is a time demanding and time saving option while financial transaction is involved between service providers and the citizens/clients.
14. System needs to be updated in such a way that will be browser independent and low bandwidth hungry. User interfaces are expected to be designed addressing user competency at different levels and presentations of UI controls are to be designed so that it can be operated irrespective of web/desktop flavor.
15. Design and update functional and analytical reports based on due study of the user requirements.
16. Provision for connecting SMS Gateway, Email notification on different event triggers and the directory of ‘user customized system message’ should be incorporated into the system.
17. To establish mobile first strategy in e-court platform, by developing mobile application for both android and iOS platforms which will be introduced as a e-court platform information and service access gateway. Update mobile app by complying the update/upgrade required by Android or iOS SDK.
18. To publish the app in App store and Play store account provided by A2I.
19. System’s presentation language, reports, analytics and values can be of both *Bengali* and *English*.
20. Role-based access control (RBAC) mechanism, integration with MyGov.  
Remarks: Role-based access control (RBAC) mechanism will be developed according to Business process of individual court system in software.
21. Develop knowledge product such a hosting specification, test cases, sizing plan, data management/archiving plan, technical administration guide, user manual, and training manual;
22. Provide training for master trainers (approximately 10 users)
23. Adjust and update system in compliance with any Security test, Load Test or IT Audit conducted by the client.
24. Ensure application-level security creating necessary controls in the software.
25. Standard Promotional content (Banner, Video, Leaflet) will be provided by firm through reimbursement.
26. Ensure all levels of testing prior to execute changes in production environment.
27. Ensure all levels of source code management and version management.
28. Recording and managing Change Request received through the method prescribed by a2i, develop and deploy necessary solutions.
29. Ensure the system browser and device compatibility.
30. Post development configuration, sizing, maintenance and troubleshooting support within the contracted period.
31. Selected firm will have to coordinate with other solution development teams working with dependent solutions/platforms. A2i will provide administrative support.
32. Selected firms must provide Monthly progress report based on project planning and timeline mentioned in inception report. The firm also provide comprehensive completion report in the contract administration meeting as required by a2i.
33. **Architecture Compliance**

In general, proposed system/s will comply with following Doptor integration specification:

- a. Common Compliance & Integration



**Authentication Services:** The proposed solution will integrate with SSO Services for Govt. Officials by Doptor and Citizen provided by CDAP. The solution should follow the standards and guidelines for communicating with these Authentication services.

**Core Data Services:** The proposed solution must use Doptor Office Information, Organogram, Officers Profile, Citizen Profile and Geographical Location (GEO). Service and information will be shared through Doptor intra system communication channel by following guidelines.

Compliance standards and guidelines are available at:  
<http://doptor.gov.bd/newportal/portal/guidelines>

- b. E-Nothi compliance and Integration specification (If filing activity is required)  
The proposed solution should be integrated with the Government eNothi System if there is any Government filing and approval related activities like decision making through filing, issuing letters/certificates and circulation etc. The proposed solution should follow the standards and guidelines for end-to-end communication between these systems.

Integration standard of e-Nothi with other applications are available at:  
<http://doptor.gov.bd/newportal/portal/servicelist/2>

#### 4. Brief description of Executive courts

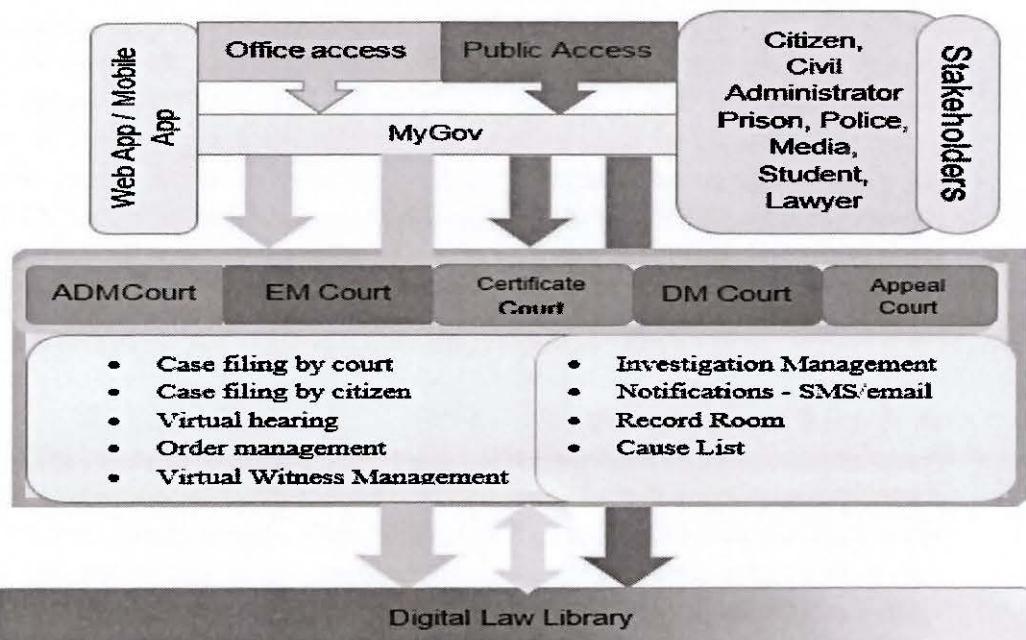


Figure:1

a) **ADM Court: (CrPC Sec: 144, 145, 147)**

According to Section 10 of Criminal Procedure Code (Cr.P.C), 1898; The Government may also appoint any Executive Magistrate to be an Additional District Magistrate, and such Additional District Magistrate shall have all or any of the powers of a District Magistrate under this Code or under any other law for the time being in force, as the Government may



direct. Additional District Magistrate (ADM) court directs the cases under section **144, 145 and 147**.

When a complaint is lodged in ADM court under stated sections, an investigation report is called for from the police or AC(Land) or members of other related agencies for testifying the complaint and a hearing of the complainant is made on the report submitted and if found true the disputant is issued a show cause. The disputant answers the show cause before the court and hearing is made on it. If found false, proceeding is drawn against the respondent/disputant. Then the witnesses from both parties are listened and recorded and analyzed thoroughly and then the final verdict is given by the court.

Last but not the least, ADM court directs the **appeal** cases of mobile courts. If any person is aggrieved by the judgments of the EM, he may appeal to ADM court and find redress for it.

**b) Executive Magistrate Court: (CrPC Sec: 98,100 107, 108,109, 110,133)**

According to Section 10 of Criminal Procedure Code (Cr.P.C), 1898; Executive Magistrate is the Magistrate of the executive organ of the People's Republic of Bangladesh. The members of the Bangladesh Civil Service (Administration) are the Executive Magistrates. They usually exercise vast executive and limited judicial power in their respective jurisdiction. They have been vested power under various sections of the Code of Criminal Procedure (CrPC),1898; Penal Code,1860; Police Regulation,1943 and many others Criminal Acts

While exercising their limited judicial power, executive magistrates direct the cases under **Section-98, 100,107, 108,109, 110, 133** etc. of the Code of Criminal Procedure,1898. The general procedure includes two parties, the complainant and the disputant. There are lawyers to move for both the parties. The Executive Magistrate takes hearing of both the parties and witnesses are heard and recorded and then the verdict is given by the EM. He also exercises the power to arrest, or to direct the arrest of and to commit to custody, a person committing an offence in presence of the Magistrate Section-64 of CrPC), to arrest, or to direct the arrest in his presence of a person for whose arrest he can issue warrant (Section-65 of CrPC), to issue search warrant for discovery of persons wrongfully confined (Section-100 of CrPC).

**c) General Certificate Court:**

A certificate court is conducted by **The Public Demands Recovery Act, 1913** -An Act to consolidate and amend the law relating to the recovery of public demands in Bangladesh. When the Certificate-officer is satisfied that any public demand payable to the Collector is due, he may sign a certificate, in the prescribed form, stating that the demand is due, and shall cause the certificate to be filed in his office. A Certificate-officer shall be deemed to be a Court, and any proceeding before him shall be deemed to be a civil proceeding within the meaning of section 14 of the Limitation Act, 1908.

**D) Mobile Court**

Mobile courts have been playing significant role to establish law and order in the society. Executive Magistrates of Bangladesh are empowered to conduct **Mobile Court** (Section-5; The Mobile Court Act, 2009) for controlling law and order situation and for ensuring social justice by curving various social problems like food adulteration, eve teasing, narcotics controlling and eviction against illegal occupation of government property.



A business diagram of Courts is attached as annexure. Bidder needs to provide high-level understanding of this business flow as a common solution framework in their proposal.

## 5. Proposed Modules/Deliverables

### 5.1 Developments of General certificate court: Web Application

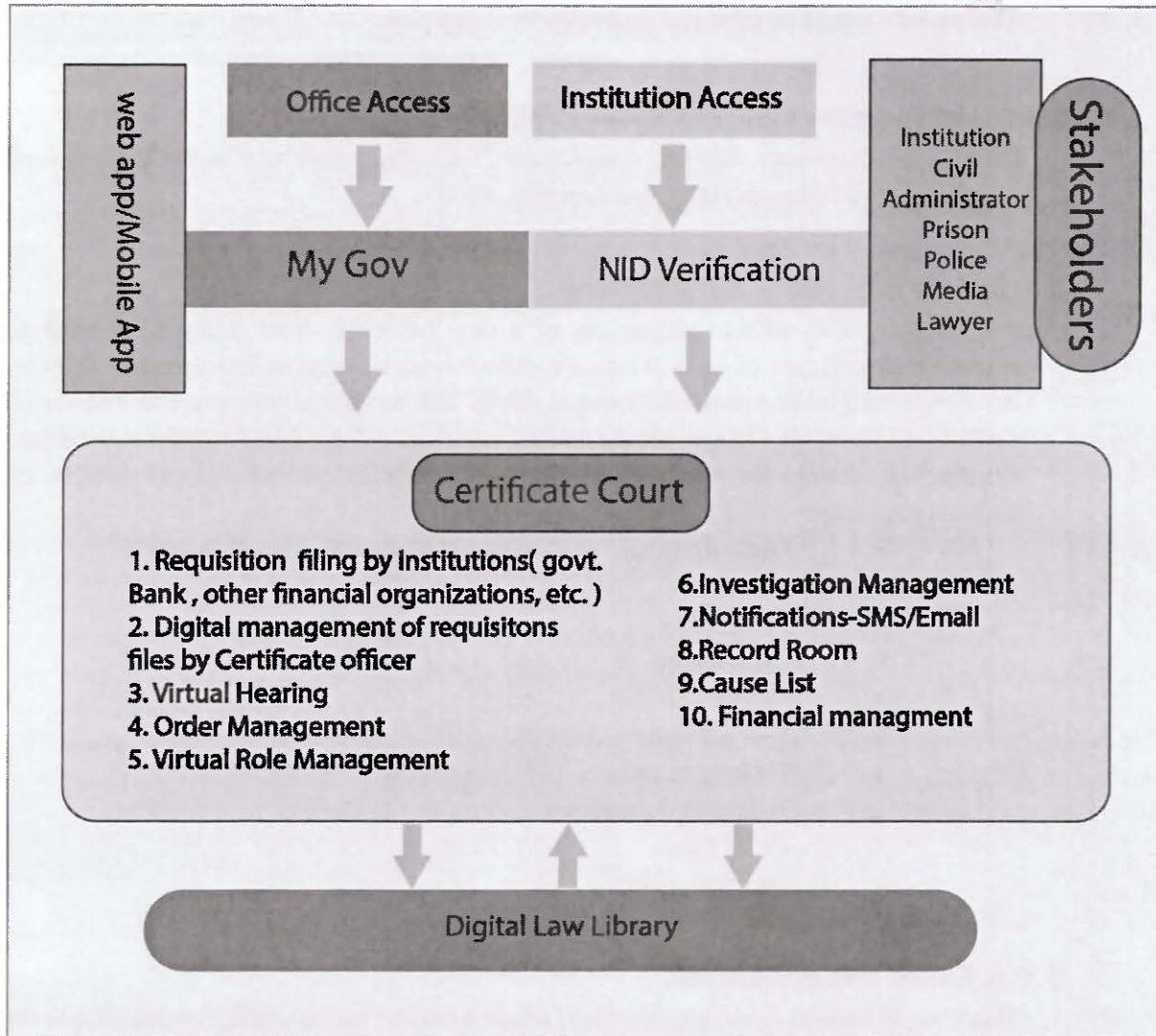


Figure: GCC System Diagram

#### 5.1.1. Settings

addresses all the general settings of the platform.

- Court Information
- Organogram Setup
- Designation Setup
- Court Office Management
- Notification System
- Configurable Case Management



### **5.1.2. User Management**

This module would be used for all user's profile management, accessibility control into the system of general certificate court.

### **5.1.3. Role Management**

This module would be managed internally by the system.

### **5.1.4. Notification system / Email / SMS**

Individuals (magistrate, lawyer, complainant, Defendant) involved in the case can get email/SMS regarding case date, order, notice, etc.

### **5.1.5. Case and Order Management**

This module shall address all aspects of a case life cycle from initial filing through disposition for all type of cases. There are various types of cases in Executive Court. [This description and to be articulated more in SRS]. The module allows users to manage (If notification required) and analyze the results with ease. A logical and structured workflow ensures that all steps are tracked and completed, deadlines are met and stakeholders are always in the loop.

- a. Order drafting
- b. Signing
- c. Forwarding
- d. Notification
- e. Disposed
- f. Law settings
- g. Order type setup
- h. Judgment Scheduling
- i. Order Log
- j. Order Tracking

### **5.1.6. Cause List generation**

There would be a configurable cause list, which would be automatically generated with the following fields.

- i. List Date
- ii. SL. No.
- iii. Case No.
- iv. Issue Brief
- v. Next Date of hearing
- vi. Magistrate Name
- vii. Last order in short form

### **5.1.7. Law Library**

Systems should have the provision to store law relevant to general certificate court in a limited scope.



### **5.1.8. Case filing by parties/industry/bank & Case filing by respective court**

Case can be filed by the system by parties/industry/bank & also by respective court magistrates.

### **5.1.9. Citizen Profile**

The citizen profile should be enhanced in such a way that citizen can easily enter into the system, lodge complaint and do other activities without any hassle.

### **5.1.10. Case Tracking**

Citizens and users can track their cases through the system.

### **5.1.11. Virtual Hearing**

Virtual hearing will be accomplished by video conferencing Tool where all participant will be presented within online conference call and performed the following courts.

### **5.1.12. System Integration for user access**

The executive magistrate court, general certificate court and mobile court System need to be integrated with several systems. Most of these integrations are required for verifying data which are provided into the system for case filing. There are also some systems which are needed to be integrated for ease of access of the citizens. The following systems need to be integrated for the executive magistrate court, general certificate court and mobile court System.

1. NID: For verification of the NID number.
2. CDAP SSO: Login SSO for citizens.
3. Google SSO: Login SSO for citizens.
4. nDoptor: Login SSO for Government officials.

## **5.2 Enhancement and maintenance of Executive Magistrate court, General certificate court & e-Mobile Court: Web Application**

### **5.2.1. Enhancement and maintenance of Executive Magistrate court, General certificate court**

Existing Modules of Executive Magistrate court and General certificate court (5.2.1 to 5.2.15). Also, Prospective firm needs to study, analyses current application status on previous deliverables mention in annexure 1

### **5.2.2. Settings**

This module addresses all the general settings of the platform.

- a. Court Information
- b. Organogram Setup
- c. Designation Setup
- d. Court Office Management



- e. Notification System
- f. Configurable Case Management

#### **5.2.3. User Management**

This module would be used for all user's profile management, accessibility control into the system.

#### **5.2.4. Role Management**

This module would be managed internally by the system.

#### **5.2.5. Case filing By Citizen/parties/industry/bank & Case filing by respective court**

Citizen can submit application through MyGov as well as respective Court system (if exist). Mentioned that bank, industry can also apply to court in case of certificate court.

#### **5.2.6. Notification System/email / SMS**

Individuals (magistrate, lawyer, complainant, Defendant) involved in the case can get email/SMS regarding case date, order, notice, etc.

#### **5.2.7. Virtual Hearing**

Virtual hearing will be accomplished by video conferencing Tool where all participant will be presented within online conference call and performed the following courts

#### **5.2.8. Case & Order Management**

This module shall address all aspects of a case life cycle from initial filing through disposition for all type of cases. There are various types of cases in Executive Court. [This description and to be articulated more in SRS]. The module allows users to manage (If notification required) and analyze the results with ease. A logical and structured workflow ensures that all steps are tracked and completed, deadlines are met and stakeholders are always in the loop.

- a. Order drafting
- b. Signing
- c. Forwarding
- d. Notification
- e. Disposed
- f. Law settings
- g. Order type setup
- h. Judgment Scheduling
- i. Order Log
- j. Order Tracking

#### **5.2.9. Investigation Management**

The module allows users to manage investigations and analyze the results with ease. A logical and structured workflow ensures that all steps are tracked and completed, deadlines are met and stakeholders are always in the loop.

- a. **Investigation Type Setup:** All type of investigation information would be incorporated into the system using this component. User should have options to manipulate this information as required.
- b. **Investigation Authority Setup:** Level of authority would be setup using this screen.
- c. **Investigation Scheduling:** Case-wise scheduling will be done using this component where there should have option to assign the individual officer with this schedule.



- d. **Investigation Log:** A detailed log will be maintained for investigation that must be tagged with specific cases.
- e. **Investigation Tracking:** There must have option to date-wise, case-wise, user-wise investigation activities and their outcome.
- f. **Alamot tagging:** All Alamot found in the investigation must have to be tagged with specific cases, investigated by an Alamot Preservation Unit.
- g. **Reporting on Investigation:** There should have options to generate different reports using different dimensions of parameters like date-wise, Investigation officer-wise, case type-wise, alamot-wise etc.

#### **5.2.10. Evidence Management**

The evidences of different cases will be incorporated into this system and archived which may be used for other cases if required in future.

#### **5.2.11. Witness Management**

Witnesses are an integral part of cases and the information of the witnesses will be available in the system and their attendance will be managed through this system and accordingly required notice, show cause, arrest warrant etc. to be served will be generated automatically from the system and will be served to the persons who will act on those.

#### **5.2.12. Cause List Management**

There would be a configurable cause list, which would be automatically generated with the following fields, but is those mentioned below:

- i. List Date
- ii. SL. No.
- iii. Case No.
- iv. Issue Brief
- v. Next Date of hearing
- vi. Magistrate Name
- vii. Last order in short form

#### **5.2.13. Citizen Profile:**

The citizen profile should be enhanced in such a way that citizen can easily enter into the system, lodge complaint and do other activities without any hassle.

#### **5.2.14. Review/Revision of Appeal:**

There should have an appeal module where citizens aggrieved from the judgment of lower court can appeal to the higher authority and get redress.

#### **5.2.15. Law library**

Systems should have the provision to store law relevant to executive court in a limited scope. Each court will have to be mapped with laws and law should be open for system user as well and public.



### **5.2.16. Case Tracking**

Case tracking allows users to search for information on applications and appeals. Users must be facilitated with parameter-based tracking. The users can use the following to track case:

- a. Keywords
- b. Magistrate's name
- c. Case Number
- d. Criminal's name
- e. Case Date
- f. Case Title

There should have a public access interface from where citizen can track this information. This public access can be done through other web application/mobile apps also. System admin will provide template & design for public view of those case list.

### **5.2.17. Enhancement and maintenance of existing e-Mobile court system (web system) with server management**

Following modules and features of the e-Mobile court system (web system) needs to be maintained and provide support to users. The firm also needs to manage the server of the e-Mobile court system.

#### **i. Case schedule management**

- a) Schedule Creation
- b) Schedule Approval
- c) Schedule publish and send
- d) Visiting place entry
- e) Team member management

#### **ii. Case entry management**

- a) Prosecution form creation
- b) Order sheet creation
- c) Seized item list creation
- d) Complaint creation
- e) Confession file creation
- f) Case tracking
- g) Appeal case entry
- h) Bail management

#### **iii. Item management**

- a) Store management
- b) Disposal management

#### **iv. Case management**

- a) Case forwarding
- b) Case status update



- c) Case files upload
- d) Appeal answer entry
- e) Bail details entry
- f) Evidence entry
- g) Witness entry
- h) Witness testimony entry

**v. Hearing date and result management**

- a) New date entry
- b) Date update
- c) Result entry

**vi. Support services and FAQ**

- a) Call centre setup
- b) Customer management system
- c) System support service
- d) Server support service

**vii. Dashboard**

**viii. Reporting**

**ix. Settings**

**5.3 Development and Maintenance of Mobile Application for e-Court**

**Platform (Executive Magistrate court, General certificate court & eMobile Court)**

**5.3.1 Mobile (Android and iOS) Application for Executive Magistrate court & General certificate court**

A Mobile application for both executive magistrate court and general certificate need to be developed for both Android and iOS based on the feature of web version. Mobile application (both android and iOS) need to be updated for executive magistrate court, certificate court time to time for fixing any bugs and developing new requirement if raised

**5.3.2. Mobile (Android and iOS) Application for e-mobile court**

A Mobile application for e-mobile court need to be developed. These mobile application needs to cover most of the features of native application which should cover (Not Limited To):

- Dashboard
- Signature Settings Change
- Designation Switching
- case filling
- short order Making
- Order sheet view



### **5.3.3 Executive magistrate and General certificate officer Perspective:**

- I. EM/ GCO Officials will be able to login into e-Court app with their credentials and find the latest information in the e-Court App.
- II. Surety Bond order issued from virtual court and status of other judiciary e-files can be viewed from this mobile application.
- III. EM/Lawyer can save cases of interest in the app. This helps them to create and manage personalized Portfolio of their cases or Personal Case Diary for further use.

### **5.3.4 Citizen Perspective:**

- I. Here, citizen will be able to search and find necessary for cause-lists through advanced searching criterion.
- II. Case Status can be searched by various options like Case Number, Party Name, Filing Number, Relevant Act of the Case and Case Type. Initial search result of case status is displayed with Case Number and names of parties.
- III. Citizen will be able to view current case status and with the entire history of the case from the App. Here, Case Details will be shown with the information of Case Type, Filing Number, Filing Date etc. Case Status will be shown with the information of First Hearing Date, Next Hearing Date, State of Case, Court Number and Designation of Judge. There will be provision for “History of Case Hearing” which will show entire history of the case from first date of hearing to current date of hearing as well as business record. Notification System

## **5.4 Development of Data Archiving:**

The existing data, generated data, log data, files, documents of **e-court platform (Executive Magistrate court, e-Mobile Court & certificate court)** system databases of any format (images, pdf, doc, excel, ppt, sql etc) must be maintained in an archiving system so that these data can be used easily if needed. Firm needs to provide an optimal process for data entry of legacy data archiving. There will be two parts of this data archiving. One is data entry & another is data archiving. For data entry part firm not necessarily entry of total case information as a general case data consists of 75 pages. Firm needs to find out which data is more important and using those data as a meta tag to further analyze consulting with domain team. After indexing those data against case number data archiving part will come to play. Scanned pages of each case will be tagged against their respective case numbers. As all case documents are confidential firm needs to provide onsite resources in all districts for legacy data entry & archiving. As of today, total number of cases around 150,000. Firm is liable for entry & archiving these data. The data archiving system should be non-redundant. Duplicity and redundancy should be avoided. No modification of raw data is allowed.

## **5.5 Establishment of Virtual Record Room:**

The court must have a virtual record room where all the court documents, files, court observation will be preserved. The executive magistrate, certificate officers and other stakeholders can easily get information, data using the virtual record room. Virtual Record Room should be designed in such a way that it can act as information getaway.



## **5.6 UI/UX Design & Development:**

E-court platform user interface is needed to redesign according to a number of perspectives. Firm will design and develop E-Court platform Service Delivery Platform in such a way that all the stakeholders can get services.

Firm will develop a wireframe by conducting continuous research and analysis regarding executive magistrate and certificate court related services of Bangladesh in collaboration with a2i and relevant stakeholder

Firm will arrange expert UI/UX teams, Domain Expert, Concern officers and Relevant Stakeholders in collaboration with a2i and continuously analyze user perspectives.

## **5.7 Advanced Search Engine Incorporation:**

Firm will integrate advanced searching facility for the users of the e-court platform through which users will be able to search their target information, Case related information within a minute.

## **5.8 Voice User Interface:**

The voice interface will help users with the ability to search for queries on the web platform with a voice command. User will search for their necessary e-court platform service-related information through their voice command.

## **5.9 Bulk SMS:**

The firm will provide the required SMS costing for at least one years.

- *30,000,000 /Year (Approx.) maximum*

## **5.10 Knowledge Sharing with foreign countries:**

The firm will arrange knowledge Sharing and exchange sessions for a2i core team in any Asian country (India, Kazakhstan, Singapore, South Korea or any other country agreed by a2i & firm) to describe how the courts of other countries perform. The cost will be reimbursed as per contract.

## **5.11 Infrastructure Development (Model Court Room & Certificate Court Room):**

In the selected district there should have a model court room so the judgement process can be run smoothly. The model court room will have top-notch interior design & setting up of whole room. Modern technological equipment requires to maximize benefit of video conferencing. Consulting firm will take necessary steps to set up a model court room for successful piloting and live operation of this application. Necessary costs to implement the settings will be provided by a2i. Firm needs to provide dedicated personnel who will be in charge of design & setting up the model digital e-court room.

Firm will coordinate maintenance & ensure support of this goods for one district (Naogaon or Sherpur/Habiganj or Any other district agreed by a2i & Firm) &. Model court room size is 1100 Sqft & Certificate court room size is 200Sqft. Minimum requirements of set up model Court is:

Model Court Room Specification:

Sl.	Item Name	Quantity
1.	Laptop (i3,10 <sup>th</sup> Generation or more)	2



2.	Laser Printer	1
3.	Scanner	1
4.	Air Conditioner (Needs to cover whole room)	5
5.	Dias (5' X 5' )	2
6.	Ejlas-(Magistrate)	1
7.	Microphone	6
8.	Portable 4k Monitor (48inch or more)	2
9.	CCTV with DVR	6
10.	Chair	20
11.	Multiplug	3
12.	Lighting	Lump sum
13.	Headphone and other essential accessories	Lump sum

Certificate Court Room Specification:

Sl.	Item Name	Quantity
1.	Laptop (i3,10 <sup>th</sup> Generation or more)	1
2.	Laser Printer	1
3.	Scanner	1
4.	Air Conditioner (Needs to cover whole room)	1
5.	Portable 4k Monitor (40inch or more)	1
6.	CCTV with DVR	2
7.	Chair	6
8.	Multiplug	3
9.	Lighting	Lump sum
10.	Headphone and other essential accessories	Lump sum

\*NB All costs associated with establishment of model court rooms including lucrative contemporary interior design will be reimbursed as per contract.

### 5.12 Streaming Service (Open Sourcing):

An open-source online hearing system e.g. Jitsi, Boithok can be developed for the purposes of conducting virtual hearing. It must have necessary options (e.g. record and save, scheduling meeting, password protected meeting link, rescheduling meeting etc). The source code can be modified according to the need of the virtual court system. Firm can also propose an alternative solution considering above mentioned requirements with better features.

### 5.13 Payment system integration:

Payment systems should be enhanced keeping in mind of the need and security of the system. The most used and user-friendly payment methods need to be integrated in the system including MFS incorporation

### 5.14 POS machine (64):

POS (point of sale) machine should be provided in 64 districts to make instant payment by debit/credit card. This POS machine needs to be integrated with necessary modules of this application. Firm will coordinate maintenance & ensure support of POS Machine.



### **5.15 Security & data privacy:**

The system needs to be protected from any type of cyber-attack. It should be developed in such a way that no data can be stolen, misused, copied or injected of the system. Data encryption should be maintained for sensitive data. Data communication should be in end-to-end encryption mechanism.

### **5.16 Content & manual:**

Firm should provide understandable digital user manual, SRS, system technical documentation with use case and database business process diagram etc.

### **5.17 Integration:**

To establish an integrated digital government and ensuring the interoperability among the e-government/eservices of Bangladesh, integration is one of the key factors which should be considered as a topmost priority. The proposed eService solution must comply with all national e-Government standards which are prescribed by the BNDA (Bangladesh National Digital Architecture) or any relevant and authorized government authority. Only an integrated and interoperable e-government/eService solution can fulfill the ultimate objectives of digitalization with the optimum use of latest and standards ICT.

No.	System Name	Purpose	Dependent Organization
1.	e-Nothi	Document approval and take relevant decisions in different segment of service's life-cycle & Certificate approval	a2i
2.	NID/Porichoy	Verify service recipient's identity	Election Commission, ICT Division
3.	SMS Gateway	Send and receive SMS	Telecom Operators
4.	Payment Gateway/ ekPay/binimoy	Collection & disbursement Bill Collection	a2i / Third Party Organization
5.	BRIS	Verify Service Recipients Identity	Birth-Death Register General Office
6.	333	This national call center service can be easily integrated as an effective information service for this digital platform.	a2i
7.	iBAS++	Regarding budgeting issue	Finance Division
8.	Mygov	For Application & Applicants	a2i
9.	POS	For Payment	Pos Operator
10.	Jitsi/Boithok	Streaming Service	BCC
11.	AI Chatbot	Information service for citizen	a2i
12.	CDAP	Information of users	a2i
13.	Bangla	Speech To Text	Bangla Project,BCC
14.	Bangla	Spell Checker	Bangla Project,BCC

### **5.18 Dashboard & Analytics for e court platform**

Visual dashboards aid the users to see what's really going on in the legal system and to make smart, data-driven decisions about what to do better.

- g. **Dashboard Configuration:** Users should have the provision to configure individual pages to view the information of all courts and executive magistrate's activities.



- h. **Personalized dashboard:** It is really necessary for every different user to increase accountability.
- i. **Graphical Representation:** All information should have graphical representation to understand the status at a glance.
- j. **Textual Representation:** It is also necessary to have the textual view of information along with the graphical view.
- k. **Drill-Down Facility with Hyperlink:** There should have options to drill down from central to individual desk level to monitor the case related activities.
- l. **Dashboard Sharing:** There will have provision to share or circulate dashboard information to other systems when necessary
- m. **Intelligent insights and directives:** The dashboard will generate intelligent insights and directives to assist higher official to take action to boost up and enrich quality service delivery.

Analytics module shall help the users make better decisions on the problems that may be rapidly changing and not easily specified in advance. Regression analysis tools must be present with customizable charts and graphs which can be exported or drilled down on to see the details.

Citizen can apply through MyGov and existing court system for a case-nothi according to the requisition form provided by the respective court. The case nothi will be approved by the respective magistrate through eNothi.

### **5.19 Reports:**

There shall be different types of reports for e-court Platform. The scope of report generation is as follows:

- i. **Dynamic Reporting**
  - a. Monthly Reports
  - b. Quarterly Reports
  - c. Cases dealt in commissions
  - d. Disposed case summaries
  - e. Pending case summaries
  - f. Disposed case details
- ii. **Preloaded Template:** There should have pre designed report templates for report generation. System users will be able to choose a template and prepare report to serve purpose.

### **5.20 Post development, Maintenance, change management for e-Court Platform:**

- a) Continuous health check of Database, tuning database, tuning codes & queries and mitigating the issues.
- b) Page load time, login response-time, on-click load time for the web application should be less than 3 seconds while this is accessed over the intranet.
- c) Average transaction response time, on-submit response-time, or any other database access/ search time should be less than 5 seconds when the system solution is accessed over the intranet.



- d) Develop & update digital training manual & video content adjusting the changes in the system.
- e) Fixing all bugs in the system irrespective of its nature and complexities.
- f) Developing, recording and reporting change documents, source code management and version management.
- g) The Service Desk team should efficiently implement changes approved by Concern Authority.
- h) The Service Desk team should implement changes ensuring no risks to the existing and integrated Services.
- i) Adjust and update system in compliance with any Security test, Load Test or IT Audit
- j) Incorporating and streamlining the system in compliance with updated versions of development tools/language/DB and ensure availability of APIs as required for integration with other services.
- k) Firm will provide call support so that all the stakeholders including the citizen can get solution of their problems and quarries
- l) Firm will make regular physical visit across the country for gathering real-life scenario and experience to enhance the system as required.

## **5.21 Quality Assurance and Testing Activities**

- 5.21.1. Approved certification from Software Quality, Testing and Certification (SQTC) Center & Bangladesh Government's e-Government Computer Incident Response Team (BGD e-GOV CIRT) Or any Certification from any international organization agreed upon a2i & responsible firm.
  - 5.21.2. Ensure Security testing of the system at a regular interval not more than six months by BGD e-GOV CIRT/Or any Certification from any international organization agreed upon a2i & responsible firm.
  - 5.21.3. Fix the necessary security holes.
  - 5.21.4. System testing at every delivery phase (according to delivery schedule) of the project ranging from 1-3 months. Following testing has to be done-
    - Accessibility testing
    - Black box testing.
    - End to end testing.
    - Functional testing.
    - Interactive testing.
    - Integration testing.
    - Load testing. ( at least 2 times in Contract)
  - 5.21.5. The following vulnerabilities must be checked and ensured security from the beginning:
    - Cross Site Request Forgery (CRSF)
    - Cross Site Scripting (XSS)
    - Session hi-jacking
    - Session Fixation
    - SQL Injection
    - Input Validation/Filtering
    - Output Escaping
    - Secure File Access
- Submit quarter-wise report on security testing and fix the necessary security holes found in security testing.



## **5.22 Post-Hosting Support**

- 5.23.1. Providing active and operation support to Data Center in application/DB sizing the product reconciling and adjusting with user-base and number of offices.
- 5.23.2. Regular database tuning and application configuration support to hosted environment.
- 5.23.3. On-demand accountable consultancy support to Data Center in terms of Data Backup Scheduling, Back-end service execution, Server Configuration for DB/Application/Load Balancing.

## **5.23 Capacity Management and Knowledge Transfer**

- 5.24.1. Facilitating monthly session (one or Two) with client team for knowledge transfer.
- 5.24.2. Provide technical consultancy to the client for operational management during implementation.
- 5.24.3. On-demand facilitation of system update information to client as mini-training session (Quarterly and/or in case of major changes executed)
- 5.24.4. Provide continuous authentic access to client experts to source code and documents. Share source code, data structure, technical documents and all other design documents with a2i and Cabinet Division.

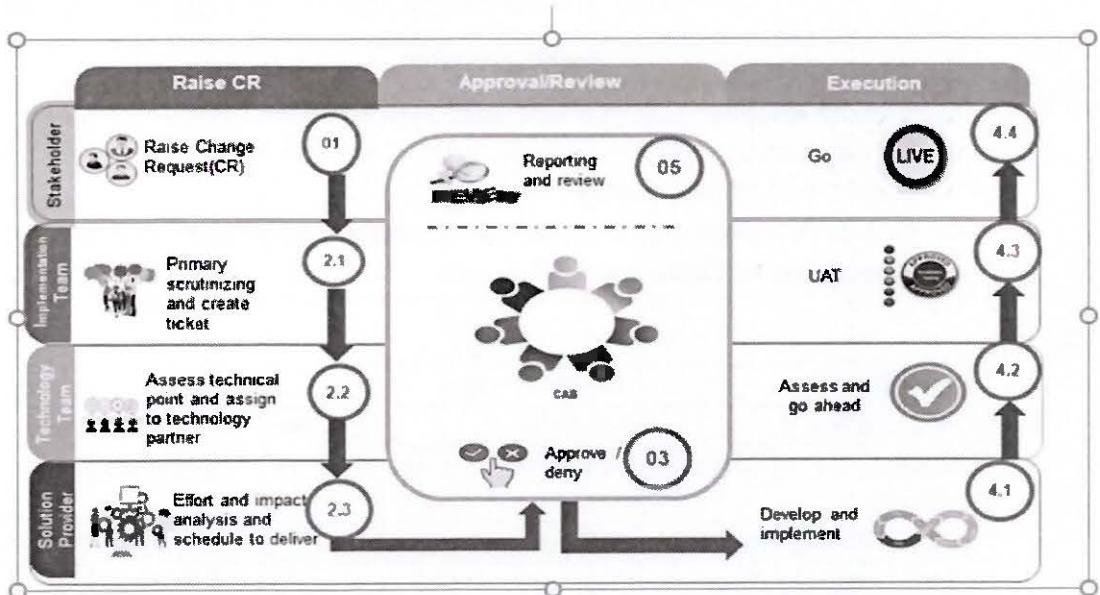
## **5.24 Training**

To successful implementation of e-court platform, user training plays one of the most vital roles in the entire implementation cycle. Firm must consider government culture, convenience of government officials & staff and ICT literacy & expertise at the time of designing user training plan for the eGovernment/digital service implementation. Based on the requirements, target prospective participants and implementation scope, Firm may plan for user training in 4 different modalities i.e., 1) Direct User Training, 2) TOT, 3) Refresher Training, 4) e-Learning Platform (Muktopaath) based training. During this training sessions minimum one person from Support & Implementation Executive needs to be present. The training workshops may hold online. However, if a2i's Digital Service 1 Implementation team decides to conduct in-person training, the firm representative trainers will have to be prepared to travel as required and, in that case, a2i will bear related expenses - i.e., logistics, travel, accommodation, food, TA/DA etc.

## **5.25 Change Management**

- 5.25.1. The Service Support team should efficiently implement changes approved by Concern Authority.
- 5.25.2. The Service Support team should implement changes ensuring no risks to the existing and integrated Services.
- 5.25.3. The Service Support team should follow Change Management process as per ITIL Framework. [ General CR process flow diagram in figure]
- 5.25.4. Mentioned that consulting firm also will have to implement the process of Incident Management, Problem Management, Release Management
- 5.25.5. Service Support must ensure to adhere to the change process from the point of proposal through acceptance, scheduling, necessary approval, review, coordination and complete within committed SLAs.





*Figure: General Request Flow of a Change Request (CR) Process*

The changes of the requirements needs to be addressed by the firm after the requirements are provided by the stakeholders as per below in documented format:

Sl No	Step / Phase	Response Time
01	Identification	Not Applicable
02	Request from Client	48 Working Hours
03	Meeting with the client	24 Working
04	Decision making / change finalization	Major changes: 7 Working days Minor changes: 3 working days
05	Development and testing	Major changes: 22 working days Minor changes: 9 working days
06	UAT and Handover	2 working days

### 5.26 Version Control

- Developing, recording and reporting change documents, source code management and version management.
- Ensure all level of testing prior to execute changes to production environment.
- Incorporating and streamlining the system in compliance with updated versions of development tools/language/DB and ensure availability of APIs as required for integration with other services.

### 5.27 Multi-layered Support System

- Deploying dedicated Support Engineers 9AM to 6PM [Including Holidays] to address support issues. This is estimated that Firm will have to have Four dedicated Support Engineer during this contract period.
- Recording, managing reporting issues and user level application related technical problems received through the method prescribed by a2i



- c) Provide active operational support to update system in compliance with respective changes by the stakeholder.
- d) Ensure a structural support management system to scrutinize the raised issue
- e) Provide approval-based issue fixing facilities at LIVE environment by providing highest level of data security
- f) Provide Post development support service under structured SLA and Change Management Architecture.

## 6. Users:

Type of Users	No. Of Users	User Role Type
District Magistrate	64/ daily	System User
Additional District Magistrate	250/daily	System User
Executive Magistrate	650/daily	System User
General certificate officer	600/daily	System User
Lawyer	As per operational requirements	System User
Witness	Avg 3000/ Month or depends on operational requirements	System User
1 <sup>st</sup> party and 2 <sup>nd</sup> Party (DM/EM Court)	4000/ Month or depends on operational requirements	System User
Bank/Industry	1000/Month or depends on operational requirements	System User
Citizen	1000000/Month or depends on operational requirements	General View

Note: System user requirements may be more or less as per practical situational requirements.

## 7. Technology Specification

### 7.1 Technology Platform

The firm will follow any industry accepted and widely used open source-based technologies, frameworks, platforms, and guidelines. Following are some technical specifications that firms should consider as references but not as the ultimate method of implementing the court order record and certified copy. Technology Specifications may change in real-time based on the context of the project and future trends.

1. TOGAF compatible or similar open-source platform to ensure enterprise level management
2. Common data platform
3. Micro service architecture following micro-service design approach.
4. Open-Source PHP Framework
5. eService bus (Enterprise Service Bus) or RESTful API gateway.
6. Rule-based authorization support for SSO
7. Bootstrap, jQuery and Ajax for best UX
8. MySQL or any other open-source RDBMS
9. Redis, Memcached, CDN or Varnish for caching and faster data delivery
10. Must ensure load balancing for scalability and failover for high availability of service endpoints
11. Code Version Controlling using GIT or Bitbucket in private mode



12. Future technology change, iterative prototyping and agility in framework design are the generic expectation
13. Kubernetes, for source version control and deployment management.
14. Cloud compatibility

## **7.2 Technology Tools:**

The firm will follow any industry accepted and widely used open source-based technologies, frameworks, platforms, and guidelines. Following are some technical specifications that firms should consider as references but not as the ultimate method of implementing the court order record and certified copy. Technology Specifications may change in real-time based on the context of the project and future trends.

- 7.2.1 Micro service architecture following micro-service design approach.
- 7.2.2 Programming Language Open-Source (PHP, Java, python etc), standard framework based development.
- 7.2.3 eService bus (Enterprise Service Bus) or RESTful API gateway.
- 7.2.4 Rule-based authorization support for SSO (i.e oAuth, oAuth2, SAML, Open ID connect etc)
- 7.2.5 Bootstrap, jQuery and Ajax for best UX
- 7.2.6 MySQL or any other open-source RDBMS
- 7.2.7 Redis, Memcached, CDN or Varnish for caching and faster data delivery
- 7.2.8 Must ensure load balancing for scalability and failover for high availability of service endpoints
- 7.2.9 Code Version Controlling using GIT or Bitbucket in private mode
- 7.2.10 Future technology change, iterative prototyping and agility in framework design are the generic expectation
- 7.2.11 Kubernetes, for source version control and deployment management.
- 7.2.12 Cloud compatibility
- 7.2.13 TOGAF compatible or similar open-source platform to ensure enterprise level management

## **8. Security:**

The firm should follow any of the industry standard secure development methodologies such as (but not limited to) Comprehensive Lightweight Application Security Process (CLASP) by OWASP etc.

- 8.1 The firm should consider (but not be limited to) common vulnerabilities such as SQL Injection, Cross Site Scripting (XSS), etc.
- 8.2 Firm will undertake responsibility for Input Validation Controls, Authorization/ Authentication Control, and other security controls in place in both test and production environments of the application.
- 8.3 The following vulnerabilities must be checked and ensured security from the beginning:
- 8.4 Cross Site Request Forgery (CSRF)
- 8.5 Cross Site Scripting (XSS)
- 8.6 Session hi-jacking o Session Fixation
- 8.7 SQL Injection
- 8.8 Input Validation/Filtering
- 8.9 Output Escaping
- 8.10 Code Injection
- 8.11 Secure File Access



## 9. Accessibility Checklist

SL.	Items to Check	Details
1.	For anything on a web page that is not text, is there any text equivalent for that item?	<ul style="list-style-type: none"> <li>Anything that does not text on a web page usually includes, but is not limited to, an image, graphic, audio clip, applets (small application running within a web browser, i.e. text chat window, etc.), tickers, or other feature that conveys meaning through a picture or sound. Examples include buttons, check boxes, pictures and embedded or streaming audio or video.</li> <li>Providing a text equivalent means that words are being used to describe what an item (that does not physically consist of text) actually is, why it is there, and any information being communicated by the use of that item or the item itself.</li> <li>Check that all images have accurate and meaningful text equivalents. Images mostly use an “alt-tag” or “longdesc” attribute as part of the object. To check, mouse users can roll their cursor over an image. If a text label or window pops up, then it has a text equivalent. Screen reader users can listen to see if an image is identified and described. It is also acceptable to simply include a text description above or below the image. For example, “The picture below shows...”</li> <li>Ascertain that images of text, graphical text (pictures of text), or text that is part of an image have a text equivalent. Be sure that the text equivalent correctly describes the image or communicates any information as part of the image. For example, if the image itself contains words, be sure the exact wording from the image is used within the text equivalent.</li> <li>Ensure any audio has a text equivalent, such as a text transcript.</li> </ul>
2.	Is captioning, audio descriptions, or other equivalent provided for presentations that utilize both audio and video at the same time?  Is captioning, descriptions, or other alternatives synchronized with the presentation?	<ul style="list-style-type: none"> <li>Determine that all audios have been captioned for the deaf and hard of hearing, and all videos have audio descriptions for blind and visually impaired.</li> <li>Ascertain that captions and audio descriptions are synchronized correctly with the audio and video. For example, synchronized captions allow someone to read captions and also watch the speaker's relevant body language.</li> <li>Remember that this only applies to multimedia presentations, i.e., those presentations utilizing both audio and video at the same time. For example, the audio and video web cast of a program would need to be synchronized. An audio web cast would require a text transcript. A silent (no audio) web slide show would require a text equivalent for any images.</li> </ul>
3.	If color was removed, would it inhibit use of the web site?	To check, view the page using a monochrome monitor (ex. black and white monitor, etc.) or by printing a page to a black and white printer.
4.	Is color being used to emphasize text or indicate an action?	If so, an alternate method needs to be included so users can identify what is being emphasized by the use of the colored text or action.



		For example, if all links on a web page are blue, than underlining the links is an acceptable method for identifying blue colored links. Another example, if users are prompted to press a green start button, than a text label above the green button saying “press green start button” is an acceptable method.
5.	Do web pages ignore user defined style sheets?	Style sheets are formatting instructions on how a page should be displayed (can also include how it is printed and presented). For example, a user specifies that they want their browser to view pages with extra-large font with white characters on a black background. These preferences are set up for all pages viewed.
6.	Does a web page override or ignore user settings?	To check, disable style sheets within the browser (Check browser’s help menu for instructions) or try changing the font size or background colors through the browser’s settings.
7.	If a link is embedded in an image, is there an equivalent text link?	<ul style="list-style-type: none"> <li>Frequently, a web designer will use an image map which contains a link or set of links.</li> <li>Check to see if the image has any text links or labels. In some cases, you may have to move the mouse around the image to see if different text labels appear over different portions of the image. Screen readers will announce “image map link...” when a link is detected. These text labels alert users that by clicking or selecting the link in this particular region of the image, it will retrieve a specific web page. This is an example of a client-side image map which can be quite accommodating to people with disabilities and those using assistive technology.</li> <li>On the other hand, there are image maps that do not indicate to the user which specific web page will be retrieved when a particular region of the image is selected. These are called server-side image maps, because the computer or server hosting the web page determines which page is sent based on portion of the image selected. These are not accessible image maps, requiring a redundant text link on the same page retrieving the same pages as those links used in the image map.</li> </ul>
8.	If information is displayed using a table(s), can columns and rows be identified by screen readers?	Using a screen reader, listen to how the table is read aloud.
9.	If frames are used, are they accurately text labeled?	Frames are used to visually separate information on a web page.
10.	Does anything on the page blink or flicker?	Ask if the web designers can prove whether any blinking or flashing elements have a frequency greater than 2 Hz and lower than 55 Hz. This requirement is necessary because some individuals with photosensitive epilepsy can have a seizure triggered by displays that flicker or flash, particularly if the flash has a high intensity and is within certain frequency ranges.



11.	Do web sites not conforming to acceptable and approved accessibility standards offer a text only equivalent of their web site?	<p>4 The World Wide Web Consortium's (W3C) Web Accessibility Initiative Guidelines and Section 508 are the two widely accepted authorities on Web accessibility and design.</p> <p>5 Web sites that cannot adhere to the accessibility guidelines set forth by W3C and Section 508 can offer a text only equivalent for all the information displayed and all functions available.</p>
12.	If scripting is used, such as JAVA, etc., is there a text equivalent so assistive technology, like screen readers, can read the information?	An example of scripting could be a stock ticker on a web page that is animated, refreshing, and displaying information. Another example is using an image, that when a mouse cursor rolls over the image, additional information pops open on the screen, and then disappears when the mouse cursor rolls off.
13.	If online forms are used, can people using adaptive technology fill in and submit all the required information?	<p>4 Can a keyboard be used to access all the form fields?</p> <p>5 Are text labels used either inside or near form fields to identify what information users should be entering?</p> <p>6 Can a screen reader identify the form(s)?</p> <p>7 Do the forms follow a logical order? For example, if a user hears "Last Name" is the corresponding form the area where they would enter their last name?</p>
14.	Is there a way for users, especially those using screen readers to skip repetitive navigational links?	Navigational links are a set of routine navigation links frequently used to move users to pages within a web site, usually located on the top or side of each web page. For example, "Help," "Contact Us," etc. links that all appear on the same page within a web site in exactly the same way and location.
15.	If users are given a certain amount of time for an action or response, is there any indication how much time they have left or an option to request more time?	Some web pages may expire or time out after a certain amount of time, and refresh the entire page, for example those requesting personal information.
16.	Unicode character set for Bangla	Use of Unicode character set for Bangla - Interspersing Bangla and English in the same page should be avoided until such time that there is a screen reader which can handle multiple languages.
17.	Accessible documents on web pages	Where it is not possible to make a document accessible, then an alternative, accessible format should be downloadable along with the original image file.
18.	Navigation mark-up	Use of heading level 1-6, in addition to navigation links like 'skip to main content'.
19.	HTML validation	HTML is the simplest programming language used for website development and is accessible on all browsers — desktop browser or a mobile browser. All web pages should have HTML validation.
20.	CSS validation	Content presented with CSS errors may lead to serious problems such as overlapping of content, making it almost impossible to read. CSS



		errors may also prevent some users from successfully carrying out custom CSS processing to set the preference of color and size of text and object to suit their vision requirement.
21.	Color adjustment option	High contrast and font customization options should be available
22.	Labeling of Links	<p>Labeling links correctly rather than just 'click here'- i.e., descriptions should be accurate.</p> <ol style="list-style-type: none"> <li>1. The web page has a descriptive and informative page title.</li> <li>2. A sign language video is provided for all media content that contains audio.</li> <li>3. The page is readable and functional when the text size is doubled.</li> <li>4. All page functionality is available using the keyboard</li> </ol>
23.	Accessibility plugin	Some accessibility features such as Monochrome, Invert Colors, Big Cursor, Highlight Link, Show Headings, Reading Guide, Reset Button, Keyboard Shortcut etc. Commonly these items are named Accessibility Plugin.
24.	Accessibility Guideline	Have to follow the WCAG 2.1 Guideline.

## 10. Risk Management Plan

Platform development is an activity that uses a variety of technological advancements and requires high levels of knowledge because every software development project contains elements of uncertainty. The success of a software development project depends quite heavily on the amount of risk that corresponds to each project activity.

To achieve a successful outcome, they must identify, assess, prioritise, and manage significant risks. A standard risk management process includes the following steps:

- Identify risks and their triggers.
- Classify and prioritize all risks
- Craft a plan that links each wager to mitigation
- Monitor for chance triggered during the project
- Implement the mitigating action if any risk materialises
- Communicate risk status throughout the project

The firm need to provide a comprehensive risk management plan focusing on the operational level to strategic level. A risk management framework should indicate the risk owner, risk mitigation approach and contingency plan.

## 11. Security Certification

8.11.1 Firm will undertake the responsibility for to get the "Audit Assessment and Reporting" certification from Bangladesh Government's Computer Incident



- Response Team (BGD e-GOV CIRT/Or any Certification from any international organization agreed upon a2i & responsible firm).
- 8.11.2** Firm will undertake the responsibility for to get the “**Vulnerability Assessment and Penetration Test**” certification from Bangladesh Government’s Computer Incident Response Team (BGD e-GOV CIRT/Or any Certification from any international organization agreed upon a2i & responsible firm).

## **12. Source code handover:**

Full source code including all developed libraries must be handed over to the A2i authority or A2i nominated organization. This should have included (Source Code, Database, files, and all the resources) with the deployment guideline. This can be done every quarter

## **13. Duration of the assignment**

- 10.1** Duration of the assignment is total 18 months.
- 10.2** Selected Firm will have to sign separate SLA and Non-discloser agreement as part of the core agreement for these 18 months.

## **14. Delivery Schedule for e-court Platform (EM, GCC, mobile court) (Subject to change at inception):**

	<b>Modules</b>		M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13	M 14	M 15	M 16	M 17	M 18
<b>1.</b>	Inception Report with Contract Management plan																			
<b>2.</b>	System Analysis and System Requirement Specification & SDD																			
<b>3.</b>	UI & UX Design																			
<b>4.</b>	Development of Configuration Module																			
<b>5.</b>	Development of Online Record Room																			
<b>6.</b>	Development of Data Archiving service System																			
<b>7.</b>	Enhancement of Case filing Module																			
<b>8.</b>	Enhancement of Hearing Module																			
<b>9.</b>	Enhancement of Witness Module																			
<b>10</b>	Set up of a Model Court Room &																			



	Certificate Court Room																							
11	Capacity Management and Knowledge Transfer																							
12	Enhancement of Case Tracking Module																							
13	Enhancement of Appeal Module																							
14	Enhancement of Case Management																							
15	Enhancement of Evidence Management Module																							
16	Enhancement of investigation Module																							
17	Enhancement of Cause list Module Reports																							
18	International knowledge sharing program																							
19	Completion of Data Entry																							
20	Development of Mobile Application for e- court Platform (EM, GC & MC)																							
21	Development & enhancement of Payment system integration																							
22	Development of Security & data privacy																							
23	Development of Content & manual																							
24	Enhancement of Reporting, Dashboard Module																							
25	Enhancement of Change Management and Version Control																							



26	Approved Certification from CIRT or Relevant organization																							
27	Integration (As per mentioned above in TOR)																							
28	Approved Certification from SQTC or Relevant organization																							
29	Piloting of the system																							
30	Incorporate Feedbacks from Piloting phase																							
31	System Ready for Live Operation																							
32	Digital Training Manual & Content																							
33	Source Code Handover																							
34	Capacity Management and Knowledge Transfer																							
35	Post Hosting Support																							
36	System Maintenance & Support (e-Mobile court system, General certificate court system & Executive Magistrate court system for both web and application version)																							
37	Final Report: Submission of Final Report Highlighting the major activities/tasks performed under the contract																							



### 15. Required Team Composition (Key Persons)

SL	Designation	Qty	Responsibilities	Required Expertise
1	Team Leader (K1)	1	The Project Manager is responsible for the day-to-day operational management of the project, including developing and overseeing work and preparation of project progress reports. S/he is responsible for regular reporting to the client. The chosen candidate is responsible for overseeing all technical aspects of the project implementation including analyze the user requirements, develop software design, choose the right technical solution as well as oversee the right implementation to ensure sustainability.	i) Minimum graduate in Computer Science and Engineering/ICT preferably having a degree from a reputed university. ii) 10 years of progressive experience with at least 5years' experience in managing in government software project, role including software design and development
2	Software Architect (K2)	1	Software Architects will make sure that the software architecture and design pattern is good enough to absorb the load of the users and it complies with deployment architecture and well manageable and sustainable.	i) Minimum graduate in Computer Science and Engineering/ICT preferably having a degree from a reputed university. ii) At least 7 years of progressive experience in architecting large scale web-based application.
3	Business Analyst (K3)	1	Business Analyst will transform domain and business logic to technical artifacts to development teams.	i) Minimum graduate in Computer Science and Engineering/ICT or relevant subjects preferably having a degree from a reputed university. ii) At least 5 years of experience in the field of business requirement study and analysis for ICT based or Software projects. iii) Must have experiences on e-Governance /Digital Service application project.
4	Database Expert (K4)	1	Database Expert is responsible for models, designs and creates the databases and tables used by a software solution.	i) Minimum graduate in Computer Science and Engineering/ICT or relevant subjects preferably having a degree from a reputed university. ii) At least 5 years of experience in designing database for enterprise grade application. iii) Must have experiences on large scale data management.
5	Development Lead (K5)	1	The Development Team Lead will consult with Development Team to ensure necessary IT solutions. (S)he will conduct with team members	i) Minimum graduate in Computer Science and Engineering/ICT preferably having a degree from a reputed university.



			to assign task and help in technical aspects where required	ii) At least 7 years of progressive experience in maintaining Development team for a large-scale application.
6	Sr. Software Engineer (K6)	1	The Sr. Software Engineer will develop code accordingly to ensure the product's usability and stability based on requirements. Assist team members in critical areas of programming.	i) Minimum graduate in Computer Science and Engineering/ICT or relevant subjects preferably having a degree from a reputed university. ii) At least 5 years of progressive experience in designing and developing enterprise grade web application
7	Software Engineer (K7)	3	The Software Engineer will Act / code accordingly to ensure the product's usability and stability based on requirements.	i) Minimum graduate in Computer Science and Engineering/ICT or relevant subjects preferably having a degree from a reputed university. ii) At least 3 years of progressive experience in designing and developing enterprise grade web application
8	Software Developer (Mobile) (K8)	3	The Software developer for mobile app will develop the app for ios and android platform.	i) Minimum graduate in Computer Science and Engineering/ICT or relevant subjects preferably having a degree from a reputed university. ii) At least 3 years of progressive experience in designing and developing enterprise grade Mobile application
9	Infrastructure Expert (K9)	1	Server Administrator will be responsible for monitoring the performance of the servers and system. (S)he will also have to assist experts of a2i.	i) Minimum graduate in Computer Science and Engineering/ICT preferably having a degree from a reputed university. ii) At least 3 years of experience in designing and configuring enterprise grade application hosting infrastructure ii) Must be known about server monitoring tools like Nagios, Cactai etc.
10	DevOps (K10)	2	DevOps will be responsible for CI/CD of the developed system as well as ensuring regular deployments.	i) Minimum graduate in Computer Science and Engineering/ICT preferably having a degree from a reputed university. ii) At least 3 years of experience in maintaining enterprise grade application hosting infrastructure



11	UI/UX Expert (K11)	1	This role is about designing the interface to ensure it delights the user.	i) Minimum graduate in any subject. ii) At least 5 years of experience in designing UI for enterprise grade application.
12	Technical Helpdesk Executive (K12)	2	This role is about analyze and address the issues coming from the stakeholders	i) Minimum graduate in disciplines from any reputed University;  ii) Should have minimum 2 years of profound experience in the field of software maintenance for web & mobile application;
13	Test Engineer (K13)	2	Test Engineer is expected to execute the test cases all across the system following the procedures	i) Minimum graduate in any subjects ii) 2 years experiences in system testing which will ensure bug free application.
14	Technical Writer (K14)	1	Record Technical description of features, API, 3rd party integration  Prepare user manual by describing the current flow of application  Create release notes with proper explanation for user	i) Minimum graduate in any subject ii) At least 3 years experiences on providing on writing technical document

#### Non-Key Persons:

1	Support & Implementation Executive (Onsite project office) (NK1)	4	Users form different offices need dedicated support to run application smoothly. These personnel will work onsite & a2i office premise.	i) Minimum graduate in any subject ii) At least 3 years experiences on providing software support & implementation services'
2	On premises support executive (NK2)	2	These personnel will be responsible for supporting client in implementing non-technical issues on client's desired premises. For set up of a Model Court Room & Certificate Court Room.	i) Minimum graduate in any subject ii) At least 1-year experiences on providing on premise support services in government offices.
3	Data Entry Operator (NK3)	9	Data Entry & Verification	i) Minimum HSC/Equivalent in any subject ii) At least 2 years experiences on providing relevant services
4	Management Coordinator	1	This role will make collaboration act as bridge among Team leader of Digital Service-1, Domain Team & Firm.	i) Minimum graduate in any subject



(Onsite project office) (NK4)		ii) At least 5 years of experience in the field of business requirement study, analysis and Implementation for ICT based Software projects.
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## 16. Onsite project office non-key persons:

Management Coordinator & Support & Implementation Executive(s) will be assigned by the Firm during inception phase. Assigned human resource(s) shall work on premises at a2i until **project contract ends**. 100% Human Resource availability shall be ensured by the service provider. For critical support & Implementation outside of a2i premises (Onsite), personnel from the service provider may be required to work as and when required by a2i upon prior notification of such requirements. This assigned human resources will bring necessary equipment's \*(i.e., Laptop) to their respective workstation. A monthly attendance sheet with deliverables needs to be signed by Team Leader of Digital Service 1/ e-Court of a2i, ICTD. This deliverables report will be added in to **System Maintenance and Support of all systems (all Offices)** section of **payment schedule**. Also, this deliverable report is a mandatory prerequisite of concerned portion of respective payment will be made by a2i as per contract.

**\* Cost of equipment will be reimbursed as per contract**

This will ensure the in-time availability of human resources with ensuring accountability, efficiency, cost saving, and meeting project deadline. However, any changes of assigned in house resources as per situational requirements by firm after inception report will be verified and approved by Team leaders of Digital Service 1.

### 15.1 Obligations for the selected Firm:

The above team (Mentioned in Team Composition) will dedicatedly work & report with the a2i's Digital Service 1 team (Domain/implementation Aspect), under the leadership of the National Portal Implementation Specialist.

## 17. Minimum Qualification Criteria:

1. Minimum 5 years' experience in ICT business as a registered company/entity in Bangladesh. (Please provide required evidence)
2. Must have valid and up-to-date Trade license/ Register of joint stock & companies (RJSC) registration (if applicable), TIN certificate, VAT Identification Number, Updated Income Tax Payment Certificate.
3. Must have experience of developing web-based enterprise solution for Government of Bangladesh. (Please provide required evidence)
4. Firm needs to have at least one existing running software solution in Bangladesh in either Government or in other Corporate Sector related to Public Service Delivery and Management, Document management or File Management, Data archiving or Data Management or Video Streaming server development or Management. (Please provide required evidence)
5. Average annual turnover is minimum BDT 1 Crore in last 2 years.
6. Average working capital/ liquid asset needs to be minimum amount of BDT 50 lac in last 2 years.
7. Documents demonstrating the management and operational capacity of the firm (Brochures, Company Profile and other documents describing company expertise, strength and experience,



core functions, products and services, similar assignments or project experience, Trainings and Human Resource strength.

#### Payment Schedule:

Sl.	Deliverable	Weight	Timeline	Payment
1	Project Inception Report, Project Management Plan	5%	End of 1 <sup>st</sup> Month	5% (Upon acceptance by the client)
2	Software Requirements Specification (SRS), System Design Documents (SDD)	3%	End of 2 <sup>nd</sup> Month	5% (Upon acceptance by the client)
	UI & UX Design Finalization	2%		
3	Development of Configuration Module	2%	End of 4 <sup>th</sup> Month	20% (Upon acceptance by the client)
	Development of Online Record Room	2%		
	Development of Data Archiving service System	3%		
	Enhancement of Case filing Module	2%		
	Enhancement of Hearing Module	2%		
	Enhancement of Witness Module	2%		
	Set up of a Model Court Room & Certificate Court Room	2%		
	Capacity Management and Knowledge Transfer	1%		
	System Maintenance and Support of all systems (all Offices)	3%		
	Quarterly Source Code Handover	1%		
4	Enhancement of Appeal Module	1%	End of 6 <sup>th</sup> Month	25% (Upon acceptance by the client)
	Enhancement of Case Tracking Module	1%		
	Enhancement of Case Management	1%		
	Enhancement of Evidence Management Module	1%		
	Enhancement of investigation Module	1%		
	Enhancement of Cause list Module	1%		
	Enhancement of Reporting, Dashboard Module	2%		
	Data Entry & Verification	5%		
	System Maintenance and Support of all systems (all Offices)	2%		
	International knowledge sharing program	10%		
5	Development of Mobile Application for e- court Platform (EM, GC & MC)	5%	End of 9 <sup>th</sup> Month	15% (Upon acceptance by the client)
	Development & enhancement of Payment system integration	1%		
	Development of Security & data privacy	1%		
	Enhancement of Change Management and Version Control	1%		
	Completion of Integration with others third party systems with necessary documents	1%		
	Development & Update Digital Training Manual and video content	1%		
	Capacity Management and Knowledge Transfer	1%		
	Data Entry & Verification	3%		



	Piloting Phase Report	1%		
6	Incorporate Feedbacks from Piloting phase	3%	End of 12 <sup>th</sup> Month	10% (Upon acceptance by the client)
	Approved Certification from CIRT or Relevant organization	1%		
	Approved Certification from SQTC or Relevant organization	1%		
	System Ready for Live Operation	1%		
	Quarterly Source Code Handover	1%		
	Data Entry & Verification	1%		
	System Maintenance and Support (all Offices)	2%		
6	System Maintenance and Enhancement and Support (all Offices)	8%	End of 15 <sup>th</sup> Month	8% (Upon acceptance by the client)
	Annual Source Code Handover	2%	End of 18 <sup>th</sup> Month	7% (Upon acceptance by the client)
7	Post-Hosting Support (all Offices)	5%		
	Final Report: Submission of Final Report Highlighting the major activities/tasks performed under the contract	5%	End of 18 <sup>th</sup> Month	5% (Upon acceptance by the client)



## 18. Annexure:

### Annexure 1:

#### Previous Deliverables List (As per Previous Contract)

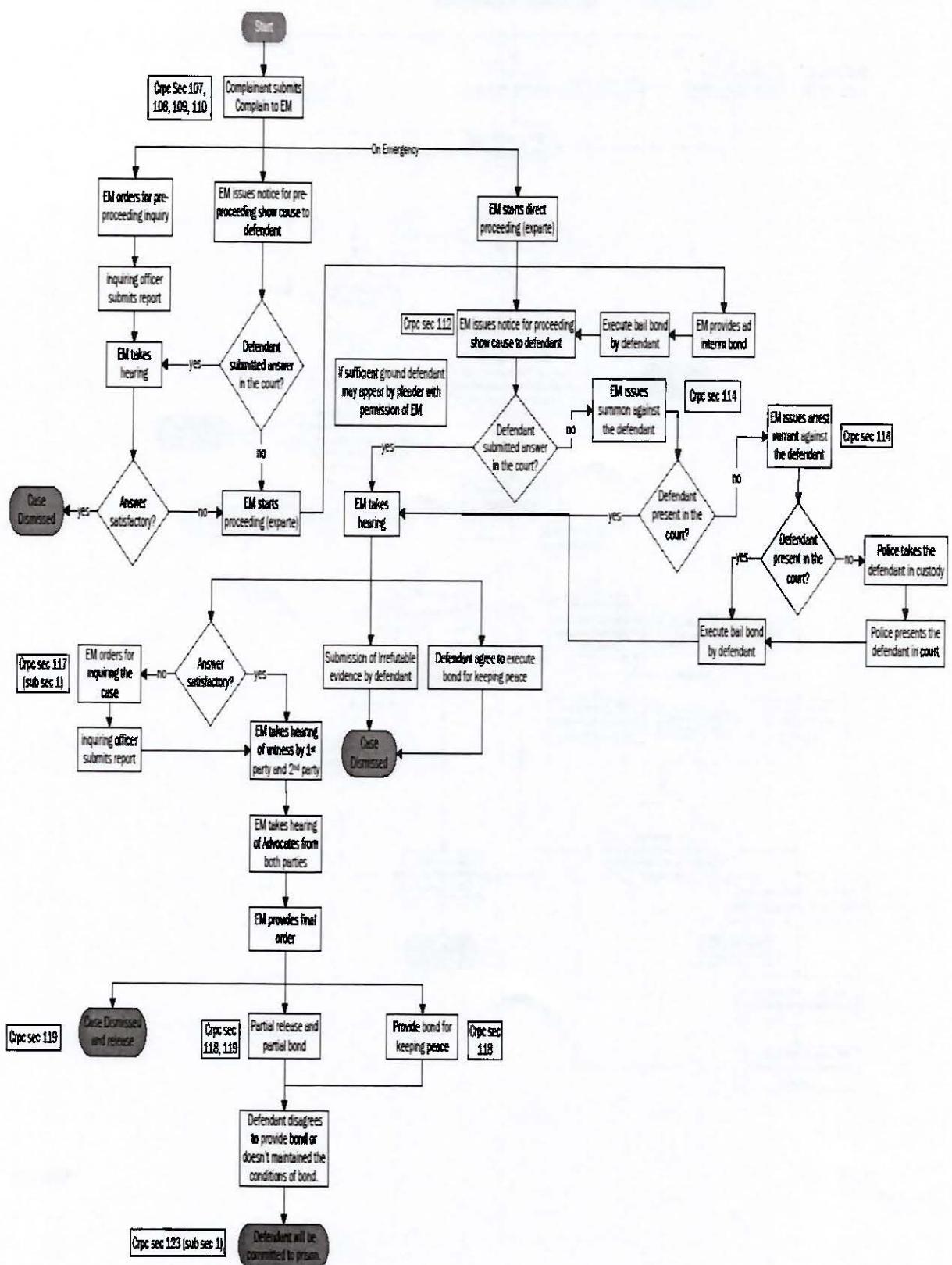
Sl no	Court type	Deliverable
1	Both	Inception report
2	GCC + EM court	Software requirement specification (SRS) document
3		- Design of GCC court
4		- Design of EM court
5	GCC	Development of Settings / Configuration
6		Development of Role management
7		Development of case filing system
8		Development of review / revision appeal
9		Development of Case management
10		Development of Order management
11		Development of Cause list module
12		Development of Investigation management
13		Development of Reporting module
14		Development of Dashboard and analytics
15		Development of citizen profile
16		Development of Case tracking
17		Development of Notification System / email / SMS- integration with central email and SMS gateway
18		User Acceptance Testing (UAT)
19		Deployment in training server
20		Training
21	EM court	Development of additional Settings / Configuration features
22		Development of additional Role management features
23		Development of case filing system
24		Development of review / revision appeal
25		Development of Case management
26		Development of Order management
27		Development of Cause list module
28		Development of Investigation management
29		Development of Evidence management
30		Development of Reporting module
31		Development of Dashboard and analytics
32		Development of additional citizen profile features
33		Development of Case tracking
34		Development of additional Notification System / email / SMS- integration with central email and SMS gateway features
35		User Acceptance Testing (UAT)
36		Deployment in Training server
37		Training
38	Both	Development of record room



39		Development of case filing through myGOV for citizens
40		Development of letter sending through nothi + investigation report tagging with respecting case file [upload hard copy/email copy/electronically received from nothi]
41		Development of Virtual & online witness Management
42		Integration: Virtual hearing – introducing Video conference tool, payment System, Stakeholder Integration – police, Bank, higher court, prison, eNothi (for approval), RMS, Land system, BD Law, Law library NTMC, NID, eksheba, e-mutation system and other required SOE systems
43	GCC	Mobile App
44		Data Migration
45	EMC	Mobile App
46		Data migration
47	Both	Continuous update on feedback and change management
48	Both	Deployment of the system in live server
49	Both	System handover

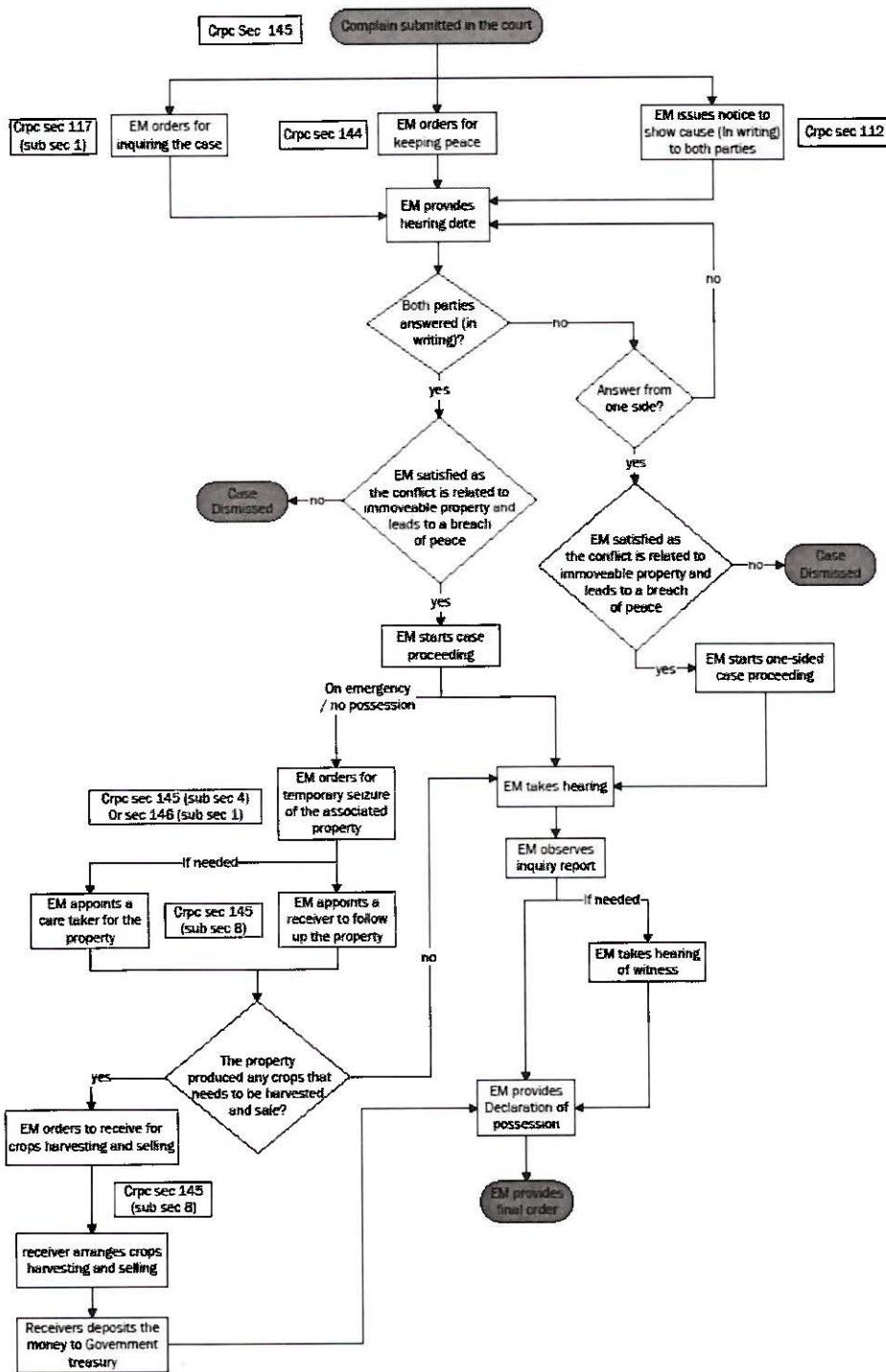


## **Executive Magistrate Court Flow Chart (Section 107 – 110)**



**Annexure :2 Executive Magistrate Flow Chart (Section 145)**





Court

### Annexure :3 General Certificate Court Process:



## সাটিফিকেট যামলাৰ প্ৰসেস

ଶାପ ସଂଖ୍ୟା: ୧୦-୧୧୩  
ମୁଦ୍ରଣ ଜନକଳ: ୦୩ ଜୁନ  
ମେଲା: ଆନ୍ତରିକ ୦୬ ମାସ

