60Project scope of work

Project Scope The scope of the project

The scope of work revolves around structuring, building and developing the opinion poll platform included in the scope of work so that it becomes an integrated, comprehensive and sustainable system for the municipal and housing sectors to launch opinion polls for targeted segments in a manner consistent with the strategies of The mission and objectives of the ministry and in a way that supports decision-making and the participation of a community in decision-making, and then carrying out the process of improvement, development and automation Followed by the operation of services and knowledge transfer, according to the directives of the project supervisor, priority plans, launch and delivery of supporting documents by explaining and interpreting the proposed solutions and recommendations and how

appliedSo that it does not affect the work and flow of business for the services included in the detailed scope of work..

FirstMechanism for receiving work environments and related businesses:The receiving mechanism is divided into two parts: processing work and receiving work.One month after signing the contract

Receiving and processing works are carried out in parallel The receiving and processing works are done under the direct supervision of the project supervisor

Work environment processing works, including:-Structuring and building work environments for the opinion poll platform included in the scope of workdevelopment– Experimental environment – Pre-production environment (- Preparing processing documents for the aforementioned work environments

 SecondlyThe main tasks of the company executing the scope of work include: - Analyzing, designing and providing development services and implementing them according to the need, priorities and plan approved by the project supervisor by following the highest international standards approved in this field and the scope of work specified for Developing a survey platform and applying artificial intelligence models using the technologies used by the Digital Transformation and Cities Agencyor as directed by the project supervisor.

-Preparing periodic reports on activities and achievements for each service within the scope of the project..

-Providing and sharing the effort expended in the process of scheduling and organizing development requirements and coordinating with the rest of the teams.

-Providing specialized technical advice regarding any projects related to platform development and integration..

-Coordinating with the productivity team and transferring knowledge to them of the platform that is being developed and making sure that the procedure is properly received.

necessary support. - The Ministry has the right to transfer whomever it determines from among the human resources that worked in this project to whom it determines from among the operating companies.contracting with the Ministry. The Ministry also has the right to transfer whomever it selects from the Ministry's team to the staffing of the consultant who undertakes the work..

-Providing highly qualified staff development services according to the policies of the Ministry of Municipal, Rural Affairs and Housingand the Ministry of Human Resources in Employment and Saudization.

-Qualify the necessary human cadres from the Ministry's employees and prepare them to receive the platform and operate it with high efficiency..

.1Analyze, design and structure the business requirements for the opinion poll platform

-The contractor must provide competencies and qualified technical personnel using best practices and standardsfor needs assessments and business analysis- The contractor's work team must collect, review, analyze and approve the business owners' requirements for the services covered in the scope of work and write them in a common language that the project owners and the technical team understand. Evaluate business processes, anticipate requirements, detect areas for improvement, and develop and implement solutions

outputs:-Studying and analyzing the current situation of the work tools used and the work teams in the ministry and the services included in the scope ofwork-Determine the scope of work with business owners

-Verify that the current procedural evidence matches the current situation.

-Transfer of knowledge to all stakeholders at all levels

-Build a business requirements documentBRD

-Obtaining initial approval of the business requirements document

   - Verifying the feasibility of implementing the proposed solutions. - Build future state document via SRS document - Get final approval of documents - Hand over documents to product owner and manager

-Write user storiesUser Stories and Acceptance Criteria for Agency Approved Work Tools Explanationrequirements of the technical team-Permanent and continuous linking between stakeholders and the development team to obtain the necessary details and address challengestechnology by searching for alternative solutions.- Arranging the requirements for the technical team to work on according to what is compatible with the owners of the project - Collaborate with the testers in defining the test items to verify the test version

-Analyzing and eliciting business requirements, documenting results, and issuing requirements documents.& UserStory Documents & System

CRs & SRS BRDs& DesignDocument

-Participate in improving and modeling procedures in line with the nature of the ministry's work.

-Monitoring the observations and views of business owners in the ministry on the service requirements model and the design and updating of business elementsaccordingly-Support and perform user acceptance testing prior to launch, deployment, and testing of modified services.

-Business requirements are not limited to:Type of requirement

 1Locating the user by marking the location on the map is a business requirement.

2Automatic retrieval of security dataTechnical, municipality, district, based on the location specified by the user(integration)

3The Arabic language support for destinations and questionnaires is technical(interface and design)

4Offline surveys require business

5Reviewing and viewing the questionnaire prior to publication is a business requirement

6Repeating and copying a previous questionnaire to create a new one with the same characteristics and the ability to modify it is a business requirement

7Exporting the report in PowerPoint, PDF and Excel formats is a business requirement.

 8 Ease of use Customer experience

 9 Support for all screen sizes and technical mobile devices (interface and design)

10 The possibility of publishing the questionnaire in multiple ways is a business requirementCreate a QR code for the link· Send text messages · Send an e-mail

11The ability to easily import data is a business requirement

12A live dashboard is a business requirement

13 Save the date and time of participation and the time it takes to complete the questionnaire as a business requirement

14 Statistics for specific types of questions (average). – Total – Net Promoter Score (NPS..etc.) Business Requirement

15 Determine the number of shares allowed for a single user, whetherVisitor or registered user Business requirement

16Possibility of building the questionnaire in the form of a sequential chartDesign Visual Steps Question is a requirementworkers

17 categorized library of reusable questions, such as satisfaction survey questions, questions for measuring the quality of a business requirement

18 Inclusion of all question types and logic skips is a business requirement.

19Providing mechanisms for integration with communication data for the target segments from various sources, and the possibility of creating and customizing The target segments according to the need of each survey and sending the survey to the target segments through various meansmessagestext – E-mail, etc. (Business requirement

20Possibility to participate in the survey in various ways, includingBusiness requirement

·Create a custom public link for the survey

·Possibility to generate an embed code for the survey so that it can be inserted within web pages

·Possibility of publishing the survey in the survey portal

·Possibility to send the survey to email or text messages with the ability to customize the message template.

·createQR Code to access the survey

21Calculating the average time to complete the survey from the user segments according toBusiness requirement

·Device type

Language

·The type of survey sent

22The ability to edit the survey data offline by exporting to an excel file, editing the file, and then re-uploading it.Excel file to update the data is a business requirement

23 The possibility of creating an executive dashboard and choosing the required data in the dashboard and the type of data display is a business requirement

24 The ability to save the participation as a draft from the participant in the questionnaire to complete it later Business requirement

25 Modifying the audience's data or participation for the authorized person is a business requirement 26 Sending the questionnaire to the target segments by e-mail, text messages or word of mouth is a business requirement 27 Automated reminders via text messages and e-mail You see a job requirement

28A report with forms, the number of posts, and the option to manually send a reminder is a business requirement.

29Possibility of building an indicator board, selecting the data of the required questionnaires in the panel, and assigning criteria and indicatorsBusiness requirement

30Direct inspection of the submission process by the holder of the authority to monitor and evaluate the participation processes A business requirement

32The possibility of building work procedures for each participation and choosing a standard procedure as a business requirement

33The possibility of creating questionnaires in Arabic, English or bilingual so that the beneficiary can choose the language Requirementworkers

34Provide a main portal to view current surveys, archives, reports and statistics with the ability to manage contentand menus and design via the polls control panel. Business Requirement 35 Providing digital tools for data analysis and the ability to save analysis results in the platform and the ability to export them Business Requirement

36Possibility to create the following elements in the formBusiness requirement

- basic elements - advanced elements - tag elements- custom elements- Elements of options -

Composite elements

- containers

Associated elements

- buttons

 - Upload files (photos / videos / documents) - Date and time, Hijri Gregorian

- Other - Multiple choice question (single choice)

-**Multiple choice question(Possibility to select more than one item)**

37- The possibility of creating a satisfaction survey matrix question so that it contains a main question and a level of satisfaction for each sub-elementWith the possibility of customizing the options in the answer according to the need of the questionnaire. **Business requirement**

38- The possibility of arranging questions and answers as a business requirement

39- The possibility of creating data components that can be reused when creating questionnaires such as a list of names of municipalities, municipalities, regions, and governorates, and defining different types of Lookups as needed. Business requirement

40- The possibility of linking the model to a responsible department with the necessary powers to view and follow up the responsible extension. Business requirement

41 - The possibility of specifying the time period for the start and end of publishing a business requirement

42 - The possibility of archiving questionnaires is a business requirement

43 - The ability to modify the questionnaire at all stages by the authority holder is a business requirement 44 - The possibility of taking multiple actions for the selected items (content installation - uninstallation - publishing content - saving content published on the main page - Unpublish - Create Shortcut - Update Title Shortcut (Business Requirement 45 Provide the ability to the secretariats and related parties in the ministry, such as agencies, to launch their own surveys and view their results through the platform without any need to build their own platforms or refer to the ministry (where that the platform serves the entire municipal sector)

46Provide the ability to link the main platform or sub-sections of the platform to main or sub-domains and customize the contentand data for each domain

47The platform is supported by an open number of all types of users on the platform without additional financial burdens on the Ministry.

shouldThe platform should include a permissions matrixSingle sign-on support according to the Ministry's requirementsSSO

- Preparing, delivering and approving studies and analysis documents:

- Opinion polls portal to display polls and informational content of polls and

guidelines and to allow participation in opinion polls by registration, national access or without registration depending on the nature of the poll and the audiencetarget

- A control panel to manage opinion polls, manage users, and automate the process of requesting opinion polls from allThe concerned authorities affiliated with the Ministry, approve, inspect and publish them in accordance with the details of business requirements..

- Develop business tools that produce ready-to-use, professionally designed and dynamically designed questionnaire templates without the need forto writing code, a variety of question formats are available

- The application of the interactive survey in some questionnaires that aim to do so.

- Develop and apply the proposed artificial intelligence models and their application mechanism.IQ Text, consolidated analysis, and iQ Statsto improve customer experience

-Spread the questions ready-made templates, and modelsSSL, multi-language support, tracking website analysis, etc.

-Personalize surveys with chatbots and autoresponder emails.

-Safety features includedSSL.

-Web publishing, email, mobile app, and link form.

-Visual Report Maker generates custom reports and charts for services..

-Add comments to and assign forms and add collaborators for fast action.

-Multiple ways to get and view customer feedback360 degrees.

- Possibilities to make polls public or private. - Changing the topic of the poll, the format, and the logo according to the identity of the user who prepared the poll so that the platform can be used by one of the trusts, and accordingly, the user of the trust must be defined and its logo placed through the management pageusers.

- Analysis based on artificial intelligence such as sentiment analysis and Cloud Word 2. Developing user interfaces for the opinion poll platform and system

-The contractor must provide competencies and qualified technical personnel using best practices and standardsFor the processes of developing user interfaces and developing services procedures.

- The contractor's work team must develop the customer's experience and user interfaces using the tools and techniques approved by the Digital Transformation and Smart Cities Agency for the services included in the scope of work, and review and approve them by the supervisor.project

-Drawing system requirements, prioritizing tasks, collaborating with team

members, and periodic releases.

-Write the code in a clear, standard way, document it, and make it reusable..

-Effective communication with the current team and other teams' business analysts.

-development potential3 CSS / HTML5

-Professional use of technologies a . Bootstrap like, CSS Frameworks and the like

 - Designing the main graphical interface model for the services. - Design of graphical interface models for internal pages - Implementation of graphical interface and user experience (UI/UX) for services

-Determine the visual identity approved by the Ministry when designing the shape and the user interface.

-Submitting three proposed graphic designs, and the Ministry has the right to choose and amend what suits them.

-Create a demo(Prototype) for all jobs before starting implementation, and it is approved by the Ministry.

-Design characterized by ease and ease of use in order to serve different segments of users.

-The services should adopt the variable design methodDesign) (Responsive) in order to run on all mobile devicesand mobile devices

-Modern design with modern technologies that can be developed.(Scalable)

-Improving the graphical interfaces of the services

oDesigning graphical interfaces and building the user experience on the basis of the best international technologies

oEase of useUsability A design and process in which extensive attention is given to the needs of the end user.

oThe ease of findingVisibility Allows users to easily find and discover content and services in a system.It offers them to benefit from the system to the fullest extent and to find interests clearly and smoothly..

o Accessibility Users will be able to find information quickly and easily across a document when it is long or short Users will be provided with different ways to find information such as navigational elements and function The search coil, table of contents, and clearly divided sections are colour-coded.

o Data Classification Structure (Tagging) Organizing all system data and classifying them in a unified manner for all users with the various powers vested in them by placing them in a hierarchical design while allowing data to be transferred from one classification to another.another when having the necessary permissions. -Provide users with different navigation options to be able to access information, content and services in different ways.versatile and has the following characteristics: oAttractive and easy to use and browse

oIt includes the visual identity approved by the Ministry in an appropriate manner..

o The service interface supports modern browsers.

o Supports multiple languages (Arabic / English) and the Hijri and Gregorian calendars

o Supports all modern tour browsers and mobile devices

-The use of programming languages used in the design of the modern user interface

.3Developing the opinion poll platform and systemThe contractor must provide the necessary work teams with high efficiency in the development of electronic platforms by using the best

practices and standards for the development processes by using the work tools used for the various platforms..

outputs:

-Review analysis documents.

-Analyze the technical impact on the service, other services or the portal in general..

-Develop the requirements described in the analysis document.

-Fix visible problems from the quality check.

-Define software standards.

-Program development based on approved software standardsStandard).

-Conducting tests for software components and their integration with each other.Testing) Integration and .(Unit

-Software reviewReview).

-Monitoring and reviewing services and applications developed by external suppliers..

-Merge the code with the base code.

-Service processing on the pre-production environment

-Preparing the deployment package for the production environment and sharing it with the productivity team.

-Participate in end-user approval of the service and ensure that the service passes testing.

-Explanation and training of the quality and productivity team on the developed services.

-Participate in system requirements analysis, task prioritization, collaboration with team members, and periodic releases.

-Software development for the services included in the scope of work with best practices according to digital governance policiesMinistry

-Develop usable code and enable faster delivery.

-Improve and solve existing software performance.

-Preparation of technical documents.

-Software development in languages approved by the Agency for Digital Transformation and Smart Cities

-Writing code with high quality and professionalism.

-Investigate and propose solutions to development and design problems.

-Developing and programming new services and systems.

-Effective communication with the current team and other teams' business analysts.

-Follow the guidelines of the non-disclosure agreementData Security Agreement (NDA) to ensure data confidentiality and non-disclosureto any third party.

-Solve problems either individually or as part of a team to meet project needs.

-Develop services and applications, from programming to launch, operation and problem solving..

-Use of design and architectural patterns and knowledge of the differences between them and what is best to use when programming interfacesapplicationsAPI

-Write the unit test codetest).

- OnAnd maintenance of the opinion poll platform and system, taking into account the application of standards and specifications for the development of serviceselectronic:

- Software management (Code) and code documentation.

-Define software standards.

- Software maintenance.

- Ensure the quality of the developed programs.

-Software reviewReview) design and (Code) from the parent company and implement the repairs report in full.

-Conducting tests for software components and their integration with each other.Testing) Integration and .(Unit

-Processing of technical documents for services.

-Help prepare the user's guide.

-Create query statements for reports on services.

- Providing technical support at the fourth level. - The developed code (Source Code) is the property of the Digital Transformation and Smart Cities Agency, and the implementing service provider must deliver the complete code with its documents and development documents in accordance with the agency's standards specified and followed by a teamInformation technology.

-A working group from the agency will review the code developed.(Source Code) and approval thereof, as the Ministry has the right to requestAny modification if needed, and the service provider must make the required modifications.

-The code must be delivered in the service testing phase so that the review and

verification by the agency is completed.

.4Test services and integrations with associated systems

-The contractor must provide competencies and qualified technical personnel using best practices and standardsFor services and systems testing operations using work tools approved by the Ministry.

- The contractor's work team must develop and implement test cases for the services included in the scope of work using tools and techniques approved by the Digital Transformation and Smart Cities Agency, and review and approve them from the project supervisorservice outputs-Develop and approve the testing methodology for the services included in the project scope of work and in accordance with the general strategyto the Ministry in the field of testing electronic services and systems

-Write the test plan for all environments and test cases.

-Execute the test plan and raise the problems.

-Continuous follow up on problems.

-Follow-up on the problems that were discovered when executing the tests and ensuring that they are resolved..

-Collaborate with a team that has completed the tests.

-Supervision and implementation of systems performance testing.

-Writing and sending the required reports.

-Develop models for different test cases within best practices

-Develop models for monitoring and tracking errors

- Develop periodic report forms that reflect the state of the quality of applications.

-Develop functional and non-functional test cases within the scope of applicationsDevelopment Testcases

for functional and non-functional testing

-Define and develop application performance testing standards

- Preparing systems inspection implementation plans as part of the project implementation plans for the concerned services. - Determine the types of tests to be implemented on the different services and systems - Execute approved test cases and develop them where needed

-Monitor for detected errorsreporting incidents, follow-up, retesting, and examining the impact of its repair Testingregression on the applications in a way to ensure the quality of the applications

-Create a test case completion confirmation matrix

-The use of systems used to monitor and follow up errors

-Preparing and submitting reports on the progress and completion of the examination.

policyProvide services and systems testing service

-Ensure that all quality inspection-related testing is performed on the designated testing environment..

-Writing test cases and monitoring errors within the dark forms from the Ministry..

-Define test cases according to any update to the reference on which the test cases are built.

-Execute approved test cases and monitor errors within approved test plans..

-Follow the error closing policy approved in the test method document in a way that ensures that errors are corrected throughApply the required check types to close the errors. - All submitted periodic reports are formulated to include best practices and provide sufficient information.appropriate to the reporting entity.

 5. Implementation of change, operation and technical support orders. At this stage, the contractor will fully guarantee the system, and during it he will be responsible for solving any problems that the work teams discover during the warranty period for each service. No working days are counted to correct these problems. Problem or malfunctions from development days. The contractor shall give the Ministry a guarantee that all modifications and repairs that will be discovered will be carried out.after launch

 . - The warranty will be for all services and smart applications and related services that have been published and approved on the production environment and that it is

accountable and obligated to fix it within the time period that the contractor will agree upon.later-The contractor must provide a problem management plan

-The contractor must clearly define the response time to the problem and the expected time for a radical or alternative solution..

-the contractor to provideAnalysis Cause Root for all problems that are reported and are mentioned in a root level matrix.service

-The contractor must specify the mechanism and levels of escalation and the method of communication.

-The scope of the warranty shall cover the following:

-Respond to breakdowns and carry out repairs according to the following schedule as a maximum.risk levellevel))Severity Description of the severity level Maximum response Maximum solution to the problem

levelThe firstS1 There is a critical problem that caused the system to stop or part of it, which does not allow users to completetheir work and actions on the system.Or the existence of a problem that causes losses or financial impact on the beneficiaries of services or the ministry.Or there is a problem that causes a negative media impact on the ministry.. Or the existence of a problem that causes an error in the correctness or accuracy of the data sent or processed. 1 hour 2 hours

The second levelS2 The existence of a problem of high importance that affects the progress of work procedures in the system, but does not stop or prevent the completion of work, does not affect the validity or accuracy of the data, and has no financial or media impact. 2 hours 4 hours

levelThirdS3 There is a problem of medium importance that does not affect the progress of work procedures in the system and does not stop or prevent

complete the work and does not affect the validity or accuracy of the data and has no financial or media impact. 4 hours 8 hours Level Four S4 There is a problem of little importance related to cosmetic matters that help improve the user's dealings with

system.8 hours 3 daysSoftware bug fixes. and software version upgrades. The guarantee program starts as of the date of approval of the Acceptance Delivery Production Final, usually after two weeks.

whoLaunching the service and making sure it works properly in the production environment.

-Provide periodic maintenance service for the system and solve functional problems through a service level agreement:

-Technical support at all levels

   - Supporting maintenance L2- L3 corrective maintenance

   - Preventive maintenance

   - Continuous updates

 6-Integration of the platform with various channels, systems and internal services

-The service provider must build all the integration points that do not currently exist and are required to complete the project.

-The service provider must define the requirements and characteristics of connectivity and integration with other systems at the agency..

-The service provider must provide the necessary design for the implementation of the integration according to what is followed by the agency..

-The service provided by the service provider is not considered complete, unless all interconnection and integration works with the systems are carried out.relevant and relevant. - Integration of the platform with all the channels proposed for dissemination of polls in various possible ways.

-Integration and linkage with geographic databases and the infrastructure of the Ministry's geographic systems.

 7. Developing dynamic opinion poll forms - The contractor must develop tools for building forms to survey opinions about specific services classified according to the required services, taking into account the principles of linguistic formulation, including (components of questions and their purpose - the question). linguistic language – type and form of questions – sequence of questions – classification

data), as well as The mechanism of administering questionnaires and verifying data quality, principles of measurement in terms of (classification - coding - measurement and its degrees - credibility and validity of the data), and the general form of the questionnaire must be taken into account in terms of (the appearance of the questionnaire - the length of the questionnaire - the introduction of the questionnaire - questionnaire instructions (

-The contractor must develop tools for preparing publicity plans for the questionnaire according to the objectives, target groups and plan.Geographical and time plan for each questionnaire- The contractor should develop tools to build forms to survey opinions about specific services classified according to the required services, taking into account the principles of linguistic formulation and include (components of questions and their purpose - linguistic integrity - the type and form of questions - the sequence of questions - classification data), as well as the mechanism for managing questionnaires and checking the quality of data The principles of measurement in terms of (classification - coding - measurement and its degrees - credibility and validity of the data), and the general form of the questionnaire must be taken into account in terms of (questionnaire appearance - questionnaire length - questionnaire introduction - questionnaire instructions)

-The contractor must develop tools for preparing publicity plans for the questionnaire according to the objectives, target groups and plan.Geographical and time plan for each questionnaire-Publish electronic opinion poll forms and enable beneficiaries to fill them in automatically through the application orplatform-Developing and presenting informational content in an innovative, attractive and purposeful manner.

.8Building and applying artificial intelligence models to analyze questionnaires.
-Studying the possibility of employing artificial intelligence in analyzing survey data.
-Preparing forms and questionnaires to collect information, and defining the extent to which artificial intelligence can be employed in analyzing results.Surveys are based on services and ratings that are specified-Designing an advanced artificial intelligence program model capable of reading and analyzing data and results and making a decision about anyNotes in addition to other operations and tasks related to the services in question and study.
-The contractor must develop the artificial intelligence model, the date of the start of the project works, according to the following::

- God begins with the learning curve25% with no less than (5000) analytical items, questionnaires, surveys.
- The ratio starts to rise to70% after the labeling process for the second stage with a number not less than (10,000) analytical elements,survey, survey.
- The ratio starts to rise to85% after the labeling process for the third stage with a number not less than (30,000) analytical elements,survey, survey.
- get to the ratio 95% of the outcomes of God's education within a maximum of 90 days from the first stage of the labeling process, with a number not less than 35,000 (35,000 analytical items, questionnaire, survey

. - The contractor must improve the model to reach an accuracy rate of up to (99%) during the first year of commencing the works.the project while continuing to improve the performance of the model throughout the project implementation period.

9. Building and implementing the smart database for decision support Building the architectural structure of the databases based on (data warehouse - analysis systems - business intelligence -...) -Structuring the user-oriented process of accessing and exploring information, and then analyzing thisinformation, and the development of the way of understanding it, which leads to the improvement of the method of decision-making.-Using real-time analytical processing systems to provide quick answers to complex inquiries as needed by senior management.
-Create a database to be fed from all electronic services and systems related to the questionnaires..
-The ability to store various types of data such as text, files, images, videos, etc..
-Analyzing data using modern technologies and converting them into indicators and reports.
-Create a list of beneficiaries, which is fed by all relevant electronic systems.
-Analyzing the results of questionnaires in a modern way and converting them into indicators and reports to support decision-making..

.10Implementation of packages of text messages at an annual rate of not less than40 million messages (distributed in 17 secretariats (targeting people in the targeted areas - the current platform is studied and analyzed and it is confirmed that all the features and characteristics of the new platform are transferred
-is provided120 million text messages from one of the main service providers (Saudi Telecom, Mobily Saudi Arabia, Zain Saudi Arabia) within the Kingdom of Saudi Arabia, including and linking

them to the messaging platform of the opinion poll platform.

11. Post the survey link by scanningQR Code in target areas (paintings)
-**The system can be created**QR Code, which contains the survey data to enable beneficiaries to access the**The questionnaire through the cameras of the smart devices**-Post the survey link by scanning**QR Code in the targeted areas (plates) according to the plan**and directives of the project supervisor

outputsfor the development of services:
Type Description Output DocumentationThey are the specifications of the system, software, processes, and methods of how to provide and meet business requirements.. which reflect
requirementsWork in the course of system development Document business requirements(updated)
(Business Requirements Document BRD(Updated

documentsAn explanation of the functional and non-functional requirements, and may include a range of use cases that describe the interactions ofuser that must be provided by the system. System requirements specification document
Software Requirements Specification - (SRS

documentsIt includes the following:
•Cipher authentication documentIt describes all parts of the system code, including objects, databases, and services.web.
•Cipher design documentIt explains the mechanism of linking the parts of the code and the developed system tools and the path of data passing between these parts.components.
•Code standards and standards documentIt explains the criteria and standards used in developing the system. code documentation / bladesystem
CodeDocumentation
packageThe code is the source code for the developed systems and components, and as part of the work plan, the code must be delivered in the service testing phase so that the review and verification is completed by the center. System code/code

Sour

ce CodeDocumentation A document explaining the final design of the system and all the technical characteristics and features of integration with other systems.

This document is a complete reference for all systems properties and components. System design and technical specifications document

Technical Specification and Design

documentsA document that explains all the infrastructure requirements and the mechanism of their connection with each other and the versions used, and also explains the mechanismLicenses in addition to contacts for technical support. Infrastructure Documentation

Infrastructure Documentation

documentsDocument describing and including all test cases executed by the developer and test results for each phasedevelopment. Test cases and results document.

Result Test and Cases Test

documentsA document showing the performance test that was carried out on the system, its results, and the stages that were worked on until results were achieved.

required. System performance test documentReport Test Performance

documentsA document explaining how to ensure the quality of the system and avoid possible problems, errors and defects. Confirmation document quality

Quality Assurance Certificate

environmentPreparing four working environments for the developed systems(Development environment, test, pre-production and production environment.)systems

Environment Preparation

documentsExplain the deployment plan and the sequence of operations and steps that must be implemented to transfer changes and each service to the system environmentnew ones. Publication planDocument Plan Deployment

documentsA document showing the detailed steps for the process of installing and launching the systems on the production environment. Add stepsSystem recovery in case of any errorProcedures (Rollback). Systems installation document

Deployment and Installation Document

documentsA document showing the plan and steps for verifying the systems after installation. Systems verification plan after installation

Deployment Verification Checklist

solutionsand electronic services Delivery and launch of integrated electronic services and systems on service channels and systemsDelivery and launch of electronic services and systems

Delivery and Launch of E-Services andSystems

documentA document detailing how to manage software release and integrations, from requirements analysis through implementation and release.Services and their deployment on service channels in addition to their integrations Version management document

Document Management

ReleaseThe service design document document by the competitor, in which the design explains the detailed technical components of the system and the mechanism of linking the components to each other.

Design Document for Services

documentA document that specifies the integrative requirements that must be provided and developed in order for the service documentation to be fully implemented.integration requirementsRequirements Integration Document A document that fully describes all the features of the integration services and the connection methods that need to be developed. Characteristics and design document

integrationDesign and Specification Integration document A document that describes each expression that is used at the application or architecture level as a whole Data dictionary

Datadictionary

documentBusiness service architecture design documentarchitecture) level service documentThe service architecture document for the technologyarchitecture) level (technical

In additionTo all the requirements of the Ministry mentioned in the booklet of conditions and specifications.:

•The contractor is responsible for all the works required to implement the new services.(analysis, development, quality control and documentation).In addition to the implementation of all integration work without any exception."If there is."

•The Contractor shall submit all documents and source codes used(Source Code) to the Ministry periodically atThe completion of the development of any service, and it is fully owned by the Ministry, and the contractor has no right to keep any copies of it, sell it, or dispose of it, otherwise it will be subject to legal accountability. In the event that the contractor fails to provide any of the services with the minimum specifications and conditions required during the contract period, the Ministry has the right to contract with others or with whom it deems qualified to implement that service, provided that the contractor bears the costs of this contract.

in a formcomplete plus fines.

61- Program of Action

programWork Duration of project implementation3 years for the contractor to complete all development, integration and launch worksIn the first year, and the technical support and platform maintenance continues until the end of the project, the contractor must develop a plan to implement all stages according to the work order and specify the number of working days and approve them from

 The project supervisor

 o Design services

 o Development services

oInstallation and configuration services

o Integration services

o Test and launch services

o Knowledge transfer services

Description

shouldThe contractor shall carry out the project works, including:

•Technical specifications for analysis work

•Studying the procedures to be automated and the services associated with them..

•Carry out a detailed analysis of the services, taking into account the requirements of the sectors and departments in the ministry, in addition to the requirements ofUsers and systems analysis should be based on a thorough study of the functions and analysis of the functional cycle of the service..

•Studying and analyzing work procedures for services to ensure the documentary cycle of service and whether there is a need to add someSteps on procedures, merging them, or canceling them through making maps of the work process flow.

requirementsnon-functional technology for services

1) Design

.1The contractor must abide by the identity and design of the electronic services of the Ministry, when designing the form and interface.service user. 2. The contractor shall create and develop a demo (Prototype) for each service, for all functions of the services.before starting implementation and is approved by the Ministry to start development work related to services.

.3The design should be characterized by ease and ease of use in order to serve the different segments of users..

.4The method of developing services should be based on the changing design.(Design) (Responsive) to operate onAll mobile devices and tablets.

.5The system must be based on the Arabic language and support the Hijri and Gregorian dates..

.6The system should provide clear and appropriate messages to users with an effective way to correlate technical error messages.of the actual problem.

.7Harmony and consistency between services to ensure that the development of unified parts between services is not repeated for each service separately..

.8Availability of the mechanism that allows adding and modifying the rules for the operation of services in a flexible and easy manner, without re-executingService development work.

system languageThe system must support multiple languages, and the service provider must deliver the system in Arabic and English.

interfaceuser:

The system interface must support all known browsers used in different operating systems The system interface must support browsers for tours, modern tablets and mobile devices of all recognized operating systems.

Workflow controlWorkflow: The service provider provides systems that support services for controlling the workflow so that the workflow can be modified, added or changed in line with the requirements of the procedure. Workflow (Configurable, not Hard-Coded) is provided.

(Workflow

performancesystemPerformance) (System

•The system must support at least fifteen thousand(500,000 concurrent users) and it should not exceedthe system for three seconds without a technical error.

•The system must support the expansion of the number of users

•The distribution of the load must be balanced on the various components of the hardware and software to ensure that there is no congestion.

•Bidders should provide a clear upgrade path for the system.(software and hardware) to support overloadingfuture.

use itwill be donewhichTechnical characteristics process •

Platform capability in terms of Back End Data logic and process •

Platform capability in terms of integration • Platform capability in terms of Enterprise IT SDLC support • Platform capability in terms of Advanced Architecture support •

Data migrate and populate The service provider filters and migrates the data to the new system and populates it, the following is a description of the current state of the data

Data type

The data is now stored in tables4 databases

Data server typeServer SQL MS and Oracle

Code or system code(Source Code) The following points apply to any part of the system code developed by the supplier to build the system from scratch or modifysystem customization:

•The symbol is the developer(Source Code) is the property of the center, and the executing service provider must deliver the complete code with the documentsand its development documents in accordance with the Center's standards set and followed by the IT team.

•A work team from the center will review the developed code.(Source Code) and approval thereof, and the Ministry has the right to request anyAmendment if needed, and the

service provider must make the required modifications.

•The code must be delivered during the service testing phase, so that the review and verification by the center is completed.

propertiesand system security standards requirements:

•During the system development process, the service provider should take into account all information security requirements and controls.available and applied by the Digital Transformation and Smart Cities Agency, and that the system does not contain security vulnerabilities identified as per

global controls(which includes, for example: (OWASP Project Security Application Web) (Open).

•The service provider should(the implementing company) setting information security standards in line with the requirements of the transformation agencydigital and smart cities, as well as adherence to globally followed information security standards..

•Test work will be carried out(which includes for example: AST Static and AST Dynamic) and the application of security controlsinformation and the level of security of the developed systems and code review/ source code by a technical teamThe information is provided by the center, and the service provider must address any defect, gaps or problem that is presented by the center..

•**Tests will be carried out**Test Penetration by a body approved by the center and by the service providerAddressing the resulting gaps and supporting the center to prove that.

•The system submitted to the Ministry must passSCA Analysis Composition .(Software

•**System security should be reviewed periodically as the project needs, and risks should be proactively identified and documented in the project.**risk matrix on an ongoing basis.

•**Documents must be secured** / Systems related to the project using a secure system for data transfer and storage as needed.

•**When performing functional requirements for using maps or functions** Google must provide solutions that are implemented in a secure manner and do not expose the system to any security risks.

shouldThe development, operation, support and continuous improvement of the proposed services shall meet the following requirements as a minimum and shall:The company provides proof of coverage for the following use cases::

Use Case Description Version Control: Data

.Each data record should be associated with timestamp of creation and update

data versionsadministrationEach data record must be associated with a creation and update timestamp..

The history of the main business data update should be saved and the old version can be viewed easily. The

.definition of the main business data will part of the requirement gathering phase

shouldSave and update data, and the old version can be viewed easily.. The definition of master business data will be part of theRequirements gathering stage.

Version Control: Setup and Configuration

administrationSettings versions

.Each data record should be associated with timestamp of creation and updateThe history of the main setup and configuration update should be saved and old version can be viewed

.easily. The definition of the main setup and configuration will be part of the required gathering phase

Each data record must be associated with a creation and update timestamp.. The main setting should be saved and the configuration updated and the old version can be viewed easily. Setup and configuration will be definedThe principals are part of the requirements gathering phase.

Version Control:

Programming UnitThe version of the programming unit should be saved and the old version can be viewed

software

versionsadministration

.easily

shouldSave a copy of the source code(software) and the old version can be viewed easily.

Audit Trail

recordsaudit

.Provide logging and instrumentation strategy that improves security and reliability of the system

savingRegistry and hardware strategy that improve system security and reliability.

.Ability to audit and log activity of the transaction and sensitive operations

strategyRegistries that improve system reliability and performance.

Provide an administrative interface in order to define the transaction and data that needs to be audited

savingApplication interface in order to specify the transaction and data that need to be audited.

Provide comprehensive audit reports. Details of the reports can be part of the gathering requirements

.phase

submissionComprehensive audit reports. Detail reports can be part of the requirements gathering phase.

.Provide the ability to classify the audit rules base on the users, transaction type or benefit program

savingThe ability to categorize review rules based on users or transaction type..

Provide di!erent levels of Audit (On Statement, Transaction, Business Unit, User levels).

savingdifferent levels of scrutiny(At List, Transaction, Business Unit, User levels.)

.Ability to activate/deactivate auditing on specific part of the business or on specific time period

capacityon activating/ Deactivate checking in a specific part of the work or in a specific time period.

Log Management

Ability to log activity of the transaction, sensitive operations and errors

capacityLogs transaction activity, sensitive operations, and errors

.Ability to detect suspicious activity using logs, which can provide early Indication of a serious attack

capacitydetect suspicious activity using logs, which can provide an early indication of a serious attack.

Provide administrators and operation team an information about the state, and health of an application by .detecting business and technical events

increaseAdministrators and operational staff provide information about the status and health of the application by detecting business events. and technical.

Provide an administrative interface in order to define the required logs and to view/monitor the logs

savingAdministrative interface for selecting and viewing required records/ monitor records.

Provide a comprehensive logs reports

savingComprehensive logs reports.

.Ability to di!erentiate between logs criticality and level

capacityDifferentiate between importance of records and level.

Reports

Provide executive dashboard for business management departments. Reports

savingAn executive control panel for business administration departments

Provide an overview dashboard of the Beneficiaries profile for the business management and the customer

savingGeneral Dashboard for Beneficiary Profile for Business and Customer Management.

Provide KPI reports

savingPerformance indicators reports

Provide Operation reports

savingOperation reports

Non-functional

requirementsSupport more than 100 K concurrent users with MOMRAH acceptable time .response and performance

supportmore than100 thousand simultaneous users with acceptable response and time performance from the Ministry of Municipal and Rural Affairs and Housing

.Portal should be scalable in order to support high number of users around 100 K

shouldThe portal should be scalable in order to support a large number of users of

about 1,000 users.100 users.

All solution components and used commutation should be secure using the latest security standard and .practices

mponents of the solution and switches used must be secure using the latest security standards and practices..program new adding demand.(like future cover to Scalable be should solution (TheThe solution can be developed to cover future requests.. (eg adding a new program)

User

Interface Provide a proper interface for each user or role in MOMRAH through understanding ofapplication users, the di!erent roles each can have, the tasks that they will perform, and the typical

activities their perform to need

they.interactionsProvide an appropriate interface for each user or role in the Ministry of Municipal, Rural Affairs and Housing by understanding the users of the application, the different roles that each of them can perform, the tasks that they will perform, and the typical interactions that they will perform.

they needthem to perform their activities.

Support di!erent roles where each role can have di!erent privileges

supportDifferent roles where each role can have different privileges.

Separate interface for internal and external users (Internet and Intranet).

interfaceSeparate for internal and external usersthe internal network The external network.

Provide interface for Administrator in order to monitor the system and do the administration actions .(.. ,through this interface (Example: review logs, shutdown acomponent

savingAn interface for the administrator to monitor the system and perform management actions through this interfaceEx: review

records,to deactivate a component,.(..

.We are looking to have a dynamic system where most of the features can be managed and configured

systemDynamic as most features can be managed and configured through user interfaces

Provide mobile interface

interfacessmart device user

.The user interface must be User Friendly

interfacesUser friendly based on user experience

.The user interface must be with High Usability

interfacesFlexible user and easy to use

.Dynamic and easy to show or hide components to/from the interface

dynamicIt is easy to show or hide components from/ to the interface easily

.Interactive

.Responsive compliant

languagesEnglish and Arabic Support.

marketthe in Devices and Browsers used highly Supporton it

.Display user friendly and clear messages with proper error tracing technique

show upClear and easy messages for the user explaining the status

.Ability to update end users messages context through administrative interface

allowModify messages through the system manager screen

Support Georgian or Hijri Date and system should do the conversion

supportGregorian and Hijri dates

Provide chatting/chatbot and social collaboration feature as communication channel

savingChat rooms

Languages, dates and numbersSupport Arabic and English languages and support multi language other languages, numbers and dates, requirements

than Arabic and English that can be defined in the future

supportdifferent languages

Display Arabic and English numbers according to the selected languages

supportArabic and English numbers according to the selected language

Notifications

Support di!erent notification channels (Email and SMS). Alerts are requirements

usedifferent channels for notifications

.Support di!erent types and classification of notifications (Critical, Normal, …) and (Error, Reminders, .(... approval, reporting,Information

supportThe different types of notifications

.Notification channel, type and classification can be defined base on target users and objective notification

selectNotification channels according to users and notification status

.Support configurable notification template

supportNotice forms and settings

Notifications and alerts sent using the application should be logged

Saveoperations on notices

.The notification can be sent base on Event Occurrence or base on Scheduled Time

sendNotifications for events based on predefined schedules

workflow and modeling:

ProcessProcess and workflow models requirementscore for flow work process the drop) and (drag configure to Ability etc Payment Registration, Appeal, services)

basic(Appeal, registration, payment, etc.)toand with fill/deal to fields specific has role each and roles multiple Support

rightsspecified to be filled/ dealing with it

specificSupport multiple roles and each role has specific authorityEasy applying for field editing option (Editable-Non Editable) according to the user role and process

.step Easy to apply for field edit option (editable - not editable) according to the user role and the step of the operation.groups working / individuals to chain approval maintain to Ability

for individualsworking groups

workflowbusiness create/update to Easy. It is easy to create/update a business workflow.

Profile Core

and FormsRequirements forms and base fileBottom, Radio List, Down Drop (Text, types fields di!erent of creation Easy Attachment Box, Check DATE, (..,Percentage)

subscript, percent, date, checkbox, attachment,(..validationfields di!erent of creation Easy Easy to create different fields

notor mandatory such properties fields di!erent of creation Easy

m

andatory or notlookups system from read that List Dropdown Dynamic of creation Easydynamic

drop-down list that is read

from system searcheslookupto according setup is box check as displayed option The

t

o searchtake to appear box text a selected it's ,when "Other" option should include it and list down drop of Creation inputuser Create a drop-down list and it must include the option "Other", when it is selected a text box appears that takes input

u

serin field or value list drop drop selected other based on reloaded should that list drop drop of Creation formtheCreate a drop-down list that should be reloaded based on the value of the other selected drop-down list or

fieldin the form

validationinputs of implementation Easy.

InputValidations

verificationfrom the input conditionsmessage validation update to method configurable a Provide a method

Configurable to update the

validation message. rule validation specific disable or enable to method configurable a Provide.

to enableor disable a specific verification rule.

clearand user friendly should be messages Validation.

traceableshould be messages Validation.

lookupssystem configurable Support. Support configurable system searches.

L

ookupAbility to define/update lookups used in the user interface through an administrative lookup tables

.screen capabilityon setting/ Update the search operations used in the user interface through the administrative screen.

valuesSupport English and Arabic lookup. Support search values in both Arabic and English.

valueslookup and lookup activate/deactivate to Ability. The ability to activate/deactivate search and search values.

dataand format di!erent with upload file data Support. Support uploading data file with different format and data.

File Upload

loaded filesstructure file and size extension, file Validate. Check the file extension, size and structure.interfacesetup through file structure and size extension, file allowed the define to Ability

Allowed file extension, size and structure through setup interface.feature business or program the on base di!erent be can structure and size extension, file allowed

The allowed file extension, size, and structure are different based on the program or business feature..filesthe Retrieve and save to order in fish (Laser tool) ECM MOMRAH with integration Support.

witha toolfish (Laser ECM (MOMRAH) for saving and restoring files.

rolesdi!erent with users create/update to Ability. The ability to create/update users with different roles.

User Management

administrationusersExternal and Internal users Support. Support for internal and external users.

mechanismauthentication solid a Provide a strong authentication mechanism.

Provide the external users the ability to create new user account base on solid authentication mechanism. **suppliedExternal users with the ability to create new user accounts on an automated basis.**

Strong authentication. foreveror period specific for users deactivate and activate to Ability.

for a **specified period or forever.**O"cer, Backend customer, be can (Person profile or person specific a to linked should be user Each Administrators or Operator, ..,

A person is a customer, background officer, employer, or supervisor,(..to, limited not is but includes, This system. the into logged users of state the control and identify to Abilityuser control and users, out log manually and currently logged are that users filter and query to ability the times login and counts login. This includes, but is not limited to, the ability to query currently registered users and record

their out**Manually and filter users, control user login numbers and user login times.**

mechanismrecovery password and account user Provide the mechanism for recovering the user account and password.

users about inclusive report submission**Provide comprehensive report on active users and their privileges**

acti **vists and their privileges.**usersprofessional for delegation auto and Delegation maintain to Ability.

and delegationautomatically for professional users.

Delegation

movebusiness

assignmentsspecific for delegation Support.

assignee di!erent for delegation Support.

Support delegation for specific period

Ability to on-board/suspend/stop a new or existing service in configurable manner

comment/ Stop a new or existing service in a configurable way

General

Preservation on capacityAbility to maintain the parametric settings for payment dates and cuto!s general requirements

Parametric settings for payment dates and their interruptionsprogramsmultiple or program single for mass-payment or individual for payment a process to Ability

processing single or bulk payments for one or multiple programsDevelopmentand Test Pre-Production, (Production, environments 4).

production, testing and development(.operationsentire the digitize to Ability

Payment Registration, (Appeal, services core for flow work process the drop) and (drag configure to Ability (etc)on configuration(drag and drop) process workflow for basic services (appeal, registration, payment, etc.)

62The place of execution

Riyadh region   •

                                                                                      ⚬

63- Table of Quantities and Prices

technologyServices and output information