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| # | Stage/Director | Description of the director |
| **1** | **Design and implementation of portals/platforms of the General Authority for Statistics** | * Unifying the Authority’s platforms and portals under a comprehensive platform and unified identity for the Authority.
* Obtaining data from various sources (example: Databases, Tableau, CMS, APIs).
* Compliant with Digital Government Authority requirements.
* The user interface should be easy and smooth.
* Follow best practices for user experience.
* Supports access via smart phones, tablets, and web pages.
* Supports all versions of operating systems and different browsers.
* Complies with the identity of the General Authority for Statistics.
* Transferring current portal data, contents and files to the new system.
* Availability of a control panel to manage the portal’s content.
* Providing the possibility of an approval cycle for published content before publishing it.
* Availability of a content management system for managing users and their permissions.
* Providing the degree of access to the data panel according to the authority of each user.
* Implement and build an interactive dashboard layer (user interface solutions) for the data platforms to be deployed
* Authority indicators through many interactive information panels, graphs and charts to
* Decision makers in government agencies, private establishments and related parties.
* It must support metadata and must provide the ability to expose relevant metadata
* Along with pointers for users to study. In addition to developing a search engine that supports detection
* Metadata in addition to the products on the platform.
* Indicators should be publicly available in both forms – as a value (current and historical) and as a comparison change
* In the period/value prior to analyzing economic trends, there is a commitment to offer and availability under conditions
* Access to data and the ability to collect it according to user permissions.
* The solution must support different visualization methods, which must be chosen depending on a specific indicator – table, graph, heat maps, etc.
* It provides the ability to create/add a new data platform through an easy user interface and fewer capabilities than
* Software knowledge.
* The solution should integrate with the GIS layer, allowing users to analyze indicators
* Specific to specific geographical areas in accordance with the privacy policy controls (there is a commitment in the offer
* Availability under the terms of access to data and the possibility of collecting it according to the user’s permissions and the ability of the user
* Grouping data according to the type of data (it can be grouped - it cannot be grouped), and the maps must be interactive.
* The solution should allow downloading of reports and data provided in different formats and notify users of updated content.
* The solution must support languages (Arabic-English).
* The ability to activate and deactivate languages ​​as needed.
* The ability to easily add a new language as settings.
* Ability to customize and create a spreadsheet for users from available data.
* Providing a user guide for managing the site.
* Front-end is separate from Back-end and works via API available from JI API Manager system
* Providing a system and reports to monitor user behavior on portals/platforms.
* Providing a system for monitoring access to the site and providing reports, including but not limited to: number of accesses - places of entry - devices used - browsers used).
* Providing three work environments for each portal/platform (development - staging - production).
* Provide Disaster Recovery for each gateway platform.
* Provides record keeping where they can be reviewed whenever needed (Logs System)
* Providing the best and latest means of protection.
* Security compliance, applying all security control requirements and following cybersecurity rules.
* Follow best standards and practices for building portals and platforms.
* Provides two-factor verification of entry status into the system (MFA).
* Focus on (SEO) to improve the position of the Authority’s website in search engines.
* Transforming the publishing process into a fully automated process, including providing a program similar to the capabilities of Word for writing bulletins directly on the site
* Providing templates whose design is agreed upon with the Authority if the user wishes to obtain a copy of the bulletins
* Providing the necessary licenses for a period of three calendar years (if available).
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| **2** | **APIs management system****(API Management Sys & Gateway)** | * Installing, operating and preparing the system to comply with the requirements of the Authority and the portals and platforms.
* Providing licenses in the name of the body required for the system if any licenses are required for a period of 3 years.
* Managing and transferring all APIs available to the Authority to the system.
* Manage usage volume and response to APIs.
* Manage policies and limits for APIs.
* Providing statistics and reports on the use of APIs.
* Provide conversion, caching, response size control and protection from attacks.
* Added additional protection on all APIS JI.
* Providing three work environments (development - staging - production)
* Provide Disaster Recovery
* Provide logs for all operations.
* Providing a control and monitoring panel according to the Authority’s requirements and needs
* Providing performance testing every 6 months during the project and during the technical support period.
* Security compliance, applying all security control requirements and following cybersecurity rules
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| **3** | **Service for developing all proxies on the API management system** | * Developing all proxies on the API management system
* Managing the API management system during the project implementation period.
* Providing usage instructions for all APIs, such as Swagger
* Providing products and packages that comply with the API usage policy at the user and API levels
* Providing analysis on the use of APIS
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| **4** | **Developer portal for APIs management system****(API Developer Portal)** | * Building a developer portal with full support for developer services that reflects the business needs and identity of the authority.
* Providing three work environments (development – ​​staging – production)
* Providing the portal in both Arabic and English)
* Compliant with Digital Government Authority requirements
* The user interface should be easy and smooth.
* Follow user experience best practices.
* Availability of a user management system and their permissions
* Provide two-factor verification of entry status into the system (MFA).
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| **5** | **Applications for mobile devices** | * Develop, implement and install applications that work on all mobile platforms such as IOS/Android
* Providing the necessary licenses for a period of 3 years
* Application accounts are for the Authority.
* Add Endto-end-encryption feature
* Providing all services provided on the site.
* The ability to share surveys, withdraw data from it, and view notifications.
* The ability to connect it to social media sites and read from them.
* Possibility of using it internally for employee services.
* Supports Arabic and English languages
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| **6** | **Managed services / development support****The Authority's APIs** | * Study the current status of existing and required indicators and available APIs to determine the required APIs.
* Developing the APIs necessary to operate and support portals and platforms.
* Developing APIS to provide the required indicators for portals and platforms through available databases and using the technology available to the Authority
* Test all available and developed APIs.
* Linking APIs to the APIs management system after developing them.

**The minimum number of qualified technical personnel to provide the service:*** 2 senior developers.
* Bachelor's degree in Computer Engineering, Computer Science, or any related field.
* At least 5 years of experience...
* Extensive proven experience in developing APIs and following best practices.
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| **7** | **Managed services to support and operate indicator displays on display devices** | * Providing the service of developing and updating screens that display indicators on presentation tools, for example but not limited to Tableau - Power BI Qlik) by following best practices for user experience and aligning them with the Authority’s identity.
* Providing adequate human and technical resources to develop and update indicator display screens.

**The minimum number of qualified technical personnel to provide the service:*** 2 specialists.
* Extensive experience in presentation tools, including but not limited to Tableau - Power).
* Bachelor's degree in Computer Engineering, Computer Science, or any related field.
* At least 5 years of experience.
* Preferably those with accredited certificates in the technologies used
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| **8** | **Managed services / to support data visualization and geographic information systems (GIS)** | * Providing the necessary licenses and tools to support data visualization and geographic information systems within one year.
* Providing adequate human-technical resources to develop and update data visualization and geographic information systems.
* Providing consulting services in data modeling and visualization by providing experts to support best user experience practices and the best use of data tools.
* Providing consulting services in Geographic Information Systems (GIS) and geographic information visualization by providing experts to support user experience best practices and best use of data tools.

**The minimum number of qualified technical personnel to provide the service:*** 1 specialist.
* Extensive experience in magazines required
* Master's or PhD in relevant journals
* At least 10 years of experience.
* Extensive experience proven by certificates in required journals.
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| **9** | **Managed services/support for statistical products** | * Providing the necessary licenses and tools to support and develop statistical products within one year.
* Providing sufficient human and technical resources to develop classifications of statistical products according to international standards, and following international best practices for statistical products and indicators.

**The minimum number of qualified technical personnel to provide the service:*** 2 specialists in the statistical field
* Extensive experience in the statistical field and statistical products.
* Master's or PhD in relevant journals
* At least 7 years of experience in the statistical field.
* Preferably those with international experience and international companies.
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| **10** | **Chatbot****Linked to portals** | * Providing an easy interface for the system administrator to add questions and answers and link them together.
* Providing the necessary licenses, if any
* Provide an option for the user to choose or write the question (e.g. choose from multiple questions, a single question, or write text).
* Answer frequently asked questions.
* Provide a complaint form and send it
* Providing the ability to search on statistical indicators
* The possibility of linking it with social networking sites.
* The solution must support both Arabic and English languages
* It can be integrated with any platform or portal.
* The possibility of conducting a questionnaire after completing the service to measure customer satisfaction, with reports to be displayed.
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| **11** | **System for sending notifications** | * Instant notification via mobile
* Send a text message.
* Send an email.
* A system for controlling recipients and dividing them into groups.
* Two-factor verification system integrated with
* Possibility of linking with other systems.
* Providing the necessary licenses, if any
* Connecting the system with social media.
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| **12** | **File Management System** | * A system that manages the authority's files by storing, uploading and sharing files.
* Possibility of linking and integration with portals and platforms.
* Possibility of classifying files
* Ability to manage access to files
* The ability to share files internally and externally
* The ability to upload files internally and externally with specific permissions.
* The ability to share files via a link that opens once, or with specific permissions, or both.
* The ability to upload files via a link that opens once, or with specific permissions, or both
* Providing the necessary licenses, if any
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| **13** | **Provision of bilateral verification** | * System to support and provide two-factor authentication (MFA)
* Possibility of integration with any system
* Providing two-factor verification for all systems in case of system access (MFA).
* Its integration with the notification sending system
* Providing the necessary licenses, if any
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| **14** | **Temporary Storage System** | * Provide a caching layer
* Settings can be controlled via a user interface
* Settings include, but are not limited to, cache time - data that can be stored - clear storage
* Providing the necessary licenses, if any.
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| **15** | **A system to support search and indexing engines** | * Data indexing system and acceleration of the search process (Searching index engine)
* Providing the necessary licenses, if any.
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| **16** | **Training** | * Providing training for a work team to develop and update all implemented systems.
* Providing the certificates, licenses and tools required for the trained work team.
* Providing training for 20 trainees from the Authority.
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| **17** | **Knowledge Transfer** | * Providing full knowledge to the authority’s work team about the implemented systems
* Providing all documents used for the implemented systems.
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| **18** | **Provision of technical support** | * Providing technical support for a period of one year starting from the date of the official activation request by the Authority.
* Conducting security checks during the technical support period and providing solutions when needed.
* Providing all updates to the systems as needed during the technical support period
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| **19** | **Documentation services and user guide** | Complete documentation of all project components, including requirements collection and the operation and management manual in Arabic and English.The following documents are examples, but are not limited to them:* Project Charter (Project Charter)
* Scope of work of the document.
* Organizational structure (detailed project schedule)
* Document testing system.
* Service Areas (SLA's).
* User Manual The User Manual is for technical support. Users.
* Backup directory.
* Performance and tolerance documentation is in order.
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| **20** | **Compliance with the controls and requirements of relevant regulatory and legislative bodies** | * The solution must be compatible with and implement the controls of the Cybersecurity Authority and the National Data Management Office.
* The solution must support open data controls on published products.
* All implemented programs are hosted and managed by the contracting company, where the hosting and server service provider is within the Kingdom of Saudi Arabia and is accredited by the Communications, Space and Technology Commission, but all databases that contain data related to the Commission are hosted within/by the Commission.
* Vulnerabilities Assessment should be conducted every six months to discover and evaluate
* Technical gaps are timely and effectively addressed.
* Penetration testing should be conducted every six months to evaluate and test the effectiveness of cybersecurity enhancement capabilities
* Penetration testing must be conducted to discover security weaknesses in all their forms, which include weaknesses that usually result from errors in application development (Application Development Error), unsafe system settings (Configurations Faults), and the possibility of exploiting a specific vulnerability (Exploitability of Identified Vulnerability).
* All cybersecurity requirements related to third parties must be implemented in accordance with the cybersecurity policy related to third parties approved in the environment and the requirements issued by the National Cybersecurity Authority.
* The results of the vulnerability examination and penetration test must be classified based on their severity and treated according to the cyber risks they pose and in accordance with the Authority’s approved risk management methodology.
* An action plan must be developed to address the results of the vulnerability scan and penetration test, which explains the impact of the risks, the mechanism for treating them, the person responsible for implementing them, and the time period required for their implementation.
* Vulnerability checks and penetration testing must be carried out by a third party provided by the service provider. After the agreement and approval of the General Department of Cybersecurity and Data Governance at the Authority.
* It is necessary to adhere to the requirements and controls of the National Cybersecurity Authority and the relevant state legislation
* Proof of the ability to delete the entity’s data in safe ways with the external party upon completion of the contractual relationship.
* Enforce contractual terms for independent security testing i.e. security code review and penetration testing before final acceptance of the external or off-the-shelf application.
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| **21** | **Delivery of work and systems** | * All work and systems must be handed over to the Authority’s work team according to a plan approved by the Authority.
* Licenses for all systems are owned by the Authority, and licenses are provided for a period of 3 years for all systems. The systems, programs, codes and ideas implemented and developed by the contractor for the Authority, all ownership rights of which belong only to the General Authority for Statistics.

When contracting to build government software, the contractor is committed to paragraph (e) of the rules regulating free and open source government software issued pursuant to Council of Ministers Resolution No. (14) dated 1/2/1443 AH.And all orders, decisions, regulations and instructions issued in this regard. Which states:* The supplier delivers the source code and related documents to the government entity.
* To provide unlimited rights to the source code and its belongings that allow reuse, copying, modification and distribution among government agencies, without the need for the original resource, while providing an open source for public benefit from the source code for all government agencies.
* The supplier must have certificates with a high level of quality in the required field of work.
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| **22** | **work team** | * Full-time work from the authority’s website.
* Providing the human resources required for the project after the Authority’s approval of the work team within only one month from the start of the project.
* Providing a work team with extensive experience in the fields related to the project and experience in government projects in the Kingdom, and each individual’s experience is not less than 5 years for developers and 7 years for project managers.
* Providing a project manager within the work team to manage the project.
* Providing UI/UX experts on the team.
* Providing DevOps experts to support Cl/CD
* Providing a specialized team to ensure quality (QA) for all systems
* Providing creative designer experts within the work team.
* Providing experts to support and operate the APIs management system
* Providing experts to support and operate portals/platforms.
* Providing experts to support and operate the project infrastructure.
* Providing the necessary support for the portal in the languages ​​(Arabic - English).
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| **23** | **Work methodology** | * The approval of the Authority must be obtained when changing the project manager or any of the project workers affiliated with the applicant entity, and it is obligatory to provide another individual with the same appropriate qualifications, provided that he is approved by the Authority before starting the project manager.
* Services and items are activated and suspended upon request from the Project Manager.
* The bidder submits a report on each completed work to the supervising authority, specifying the work he has completed. The supervising authority audits it and issues a certificate of completion at each major stage of the project, explaining the situation. In the event that the applicant fails to fulfill any of his obligations, he will be fined for compensation. Default according to the actual performance percentage and according to what the supervising authority determines based on work progress reports.
* All operations, at all stages, must be carried out at the Authority’s headquarters.
* The applicant party must be fully responsible for paying all the entitlements of its employees in carrying out the work subject to the contract.
* All project employees must be subject to the General Authority for Statistics’ confidentiality law by signing a non-disclosure document to be part of the contract documents with the professional cadres providing the service obligating them not to disclose any information about the work they perform.
* Providing a complete plan with all the tools and technology required for the project after the Authority’s approval within just two weeks from the start of the project.
* Providing the project work plan and approving it from the Authority within two weeks of the start of the project.
* Working with the Agile system for the entire project.
* Providing a weekly report to management on the status of the project, and a daily report to the project manager at the Authority.
* Providing all prototypes and complete UI/UX designs for all platforms, portals, and indicator screens and approving them by the Authority before implementing them.
* Providing CI/CD for all systems
* Providing a service level agreement (SLA) for services and systems at the beginning of the project and approving it by the Authority.

**The time period specified for fixing technical problems:**

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| **#** | **Malfunction level** | **Response time** | **Reform time** |
| 1 | Embarrassment | One hour | Two hours |
| 2 | Middle | One hour | 4 hours |
| 3 | Basic | One hour | 24 hours |

* Providing stability and continuity of services and systems at a minimum rate of 99% annually.
* Providing all necessary quality tests for all developed systems. for example, and not as a limitation
* User interface testing
* Test system functionality
* System performance testing
* Security tests
* Usage test
* Test recovery
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