TERM OF REFERENCES FOR MODERNIZATION (DEVELOPMENT) OF THE OFFICIAL WEBSITE FOR THE NATIONAL STATISTICAL COMMITTEE OF THE KYRGYZ REPUBLICTASSMP/CS/CQS/C3-C4/3-6

Contents

1. **Introduction**

The purpose of this Terms of Reference is to develop the official website of the National Statistical Committee of the Kyrgyz Republic (Natstatcom), which is the leading statistical agency in the country. The national statistical system plays an important role in collecting, analyzing and providing reliable and up-to-date statistical information to a wide audience of users, including government agencies, researchers, international organizations (e.g. World Bank, IMF, UN and its agencies, Eurostat, etc.), business sector and the public. The National Statistical Committee of the Kyrgyz Republic provides reliable and objective statistical information, which serves as a basis for public policy making, decision making and development planning. For this purpose, the National Statistical Committee of the Kyrgyz Republic conducts regular surveys of the population, businesses and organizations to obtain up-to-date data. The National Statistical Committee of the Kyrgyz Republic also receives data from other ministries, departments and agencies of the government. All these data are analyzed and aggregated at the national and subnational levels, as well as by other categories, and then disseminated.

The National Statistical Committee of the Kyrgyz Republic produces statistical reports, publications and analytical materials available to a wide range of users. It also cooperates with international organizations and participates in international statistical programs and projects on exchange of experience and methodology.

Statistical websites are not only the primary data dissemination channel for NSOs; they are also a forum to promote the NSO's visibility and a mean to communicate with current and future users. NSC needs to develop a new official website to enhance statistical dissemination further and ensure the best user experience. In parallel, NSC intends to set up the statistical dissemination system as a whole, especially the accessibility of statistical indicators throughout the new platform (e.g. .Stat Suite, KOSIS and etc.), which will provide user-friendly tools to select data, create tables and/or charts and download in various machine-readable formats. It is assumed that the transition period of all statistical indicators to the new dissemination platform, with one unique dissemination database, will last longer than the development of the new website. The new platform for data dissemination will be a separate solution linked with the new website. Until then, all statistical indicators should be disseminated on the new website in a format similar to the one on the present NSC website.

The new official website aims to provide a convenient and accessible source of statistical information and publications and improve interaction with users.

The key requirements for developing an official website are responsive design, easy navigation, security, visualization, scalability, dissemination of statistical information, easy search and filtering of information, and a reliable Content Management System (CMS) for sustainability and maintainability.

The following statement of work describes the basic functional and non-functional requirements, site structure, interface design, and technological solutions that must be designed, developed, tested, and put into production for successful website development.

1.1. Main tasks for the Consulting Firm

- Provide a solution for the new NSC website in the format of a "turnkey solution" (including the stages of prototyping, design refinement, programming, migration of all content, coordination of the project with the Client, deployment of the site on the Client's hosting platform);
- Develop a user manual and conduct training sessions for the support staff, employees of the Department of Summary Works, Communications and dissemination of statistical information of the NCS and system administrators to perform content management, system maintenance and administration;
- Provide administrative and technical support, quality control during the warranty period of

one year (365 calendar days) after signing the acts of the final acceptance of work.

1.2. Main objectives of developing the website of the National Statistical Committee of the Kyrgyz Republic

a) *Public access to statistical information*: The main objective is to provide public access to statistical information on various spheres of life and activities in Kyrgyzstan. This includes access to press releases, publications, spreadsheets, timeseries/dinamic tables, etc. on population, economy, social, trade, infrastructure and other aspects that may be useful to researchers, government agencies, the business sector and other user groups.

Information on the release schedule of press releases and publications should be available through the release calendar. The release calendar should be prepared for the whole calendar year in advance (for 12 months), as the period required to publish all planned press releases and publications for the concrete year (e.g., 2025).

It is necessary to ensure the ability to load the complete content of the release calendar, and there should not be any time restrictions due to possible changes in the release calendar. Details of the content and overall requirements of the release calendar functionalities (Subsection 6.7) should be considered.

c) *Easy search and navigation*: The site should provide easy search and navigation through the various sections and categories of statistical information. Users should be able to easily find the data they need, use filters and sort for specific results.

d) *Accessibility of statistical indicators*: The link with the new platform (e.g., .Stat Suite, KOSIS and etc.) for data dissemination in the future will ensure the accessibility of all statistical indicators on the new NSC website.

e) *Data visualization:* The site should provide modern visualization of selected statistical indicators through graphs, charts, maps and other interactive elements. This functionality will help make the key statistical information more understandable, allowing for data comparison, trend analysis, and conclusions. Data for the selected statistical indicators should be stored in the website's database until a new data dissemination platform is established.

f) *Accessibility of reference metadata*: A link to the reference metadata is a prerequisite for providing users with all necessary information about the statistical indicators published on the new website (Annex 4).

g) *Feedback and contacts*: The website should provide a feedback request function where users can ask questions, submit requests for more information or comment on the data provided. It is also important to provide contact details so users can contact the Client-facing staff of the National Statistical Committee of the Kyrgyz Republic, including online correspondence through the website, where all users can refer to the "Online Consultant" module to get answers to their questions (Requirements are specified in Section 6, subsection 6.4).

h) *Relevance and updating*: The site must be kept up to date and regularly updated with new data and information, ensuring that users receive up-to-date and reliable statistical data on Kyrgyzstan.

i) _Establishment and Accessibility of the Publication Repository_: The new website should provide public access to the electronic library for all statistical publications, including press releases and storytelling. Users should have the possibility to search and filter the library by different information (e.g. title, statistical area, statistical subarea, reference period from-before, release period from-before, etc.). Details of the content and overall requirements of the electronic publication library functionalities (Subsection 6.7) should be considered.

2. Scope of services

2.1. General

The scope of services comprises the development of a new NSC website solution intending to improve the existing NSC dissemination system. The services include the following elements:

- Management of the project, including regular reporting on the technical and financial aspects of the projects;
- A detailed project plan for the development and implementation of the new website;
- Development and implementation of new website;
- Training sessions for the support staff, employees of the Department of Summary Works, Communications and dissemination of statistical information of the NSC and system administrators to perform content management, system maintenance and administration.

2.2. Specific work

- **Activity 1**: Technical and functional specifications of the new NSC website

Based on the analyses of the current NSC official website (https://stat.gov.kg/), ToR objectives and Client information, the Consulting Firm should prepare the technical and functional specifications necessary for project implementation.

The technical and functional specifications should include the following (but not limited to):

1) Detailed architecture of the solution as well as the design of the system and database;
2) Detailed design (architecture, content, modules, functionality, etc.) of the new NSC website;
3) Detailed design (architecture, content, modules, functionality, etc.) of auxiliary services/applications for Data Visualization Tool and its management system, indicator coding system, indicator metadata, classifiers, etc.;
4) Detailed design (architecture, content, modules, functionality, etc.) of auxiliary services/applications for Repository of Release and Events Calendar and Publication (including Press Releases, Spreadsheets, Timeseries, etc.) and their management system, file encoding system, etc.;
5) Detailed design (architecture, content, modules, functionality, etc.) of auxiliary services/applications for the "Online Consultant" module;
6) Project implementation methodology;
7) Detailed planning of the process for the development and implementation of the new NSC website and auxiliary services/applications;
8) Documentation with requirements/Quantity specification for hardware and software;
9) Future IT staff requirements and roles & responsibilities definition for future system administrator(s) of the new website solution, including all auxiliary services/applications;
10) A detailed Gantt chart showing the stages/main results and activities and highlighting the critical path and version number, as well as the duration of the task and the expected start and end dates;
11) Any other information and details that are relevant to this website development project.

One of the main issues in this activity is selecting a sustainable and reliable solution for website administration and maintenance. From the perspective of sustainability and maintainability of an expected solution, the website should be developed using a content management system (CMS) rather than custom-coding web pages. When selecting a CMS, the Consulting Firm should consider open-source CMS that is easy to use and offer a good selection of free themes and website features (plugins). The choice of CMS should consider the software requirements (Subsection 6.5.).

Description of the technical solution should fully meet all functional requirements of the new NSC website. The list of general requirements for developing a new website (Section 6.) must be considered when preparing results within this activity.

The output of this activity will be the primary input for the activities listed below.

- **Activity 2**: Creating a prototype of the new design of the official NSC website (website mockup) and a prototype of auxiliary services/applications with interconnection among them

Regarding the outputs of the previous activity, the Consulting Firm will prepare a prototype of the new NSC official website solution design. That includes the following:

> - Final website design;
> - A prototype of auxiliary services/applications, defined within Activity 1, with interconnection between them and the new website.

The Consulting Firm should design the user interface and provide prototypes (schematic layouts) of the layout of key elements of the system interfaces. It is important for the Consulting Firm to have a user interface expert on their team, who should work with the designated staff of the NSC in developing the user interface.

A proposal for all website pages and functionality layouts is available in Annex 1.

The Consulting Firm shall change the color scheme of the developed design layout following the font type, font size and color scheme specified in these specifications. The main colors and font requirements are given in Annex 2.

The system interfaces should be clear and convenient, not overloaded with graphic elements, and provide quick display in screen forms. All screen forms of the user interfaces should be made in a single graphic design, with the same location of the main control and navigation elements.

Final website design

The website design should be finalized on the basis of the existing prototype and submitted for approval to the National Statistics Committee of the Kyrgyz Republic. The prototype and design layouts are presented in versions for desktop computers, tablets and smartphones. From the provided mockups, the National Statistical Committee of the Kyrgyz Republic staff will select one to be taken as a base case.

The staff of the National Statistical Committee of the Kyrgyz Republic responsible for the user interface may ask the Consulting Firm to make additional changes to the layout they have already selected (before its final approval) if the Consulting Firm also approves them as improving the appearance of the site, its user-friendliness, navigation structure and other usability parameters.

Once the layout has been approved and signed, the Consulting Firm will proceed to the next work activity, and the staff of the National Statistical Committee of the Kyrgyz Republic related to the user interface should no longer be able to change their requirements for the website design significantly. In other words, the signed layout will be fixed as a working (reference) layout within the framework of this project.

A prototype of auxiliary services/applications, defined within Activity 1, with interconnection between them and the new website

To establish an effective interconnection between auxiliary services/applications and a functional new NSC website, it is recommended that a „Shared SQL database" be designed as a common repository of all data/information needed within the website solution. This approach will ensure the new site pages are updated effectively and on time with statistical information from the "one-stop-shop" database.

Statistical information produced by any National Statistical Institution is split into statistical areas and/or statistical subareas. Therefore, the starting point for creating a common system for listed auxiliary services/applications is to define all necessary information by statistical areas and/or subareas of the NSC.

Auxiliary services/applications for Data Visualization Tool

Statistical indicators are the primary information to maintain Data Visualizaton Tool and produce outputs from that system. The following general indicator attributes should be:

- Statistical areas
- Statistical subarea
- Statistical survey
- The name of the indicator
- Periodicity (monthly, quarterly, annual, etc.)
- Dinamic table/timeseries (link on dinamic table file - XLS)
- Reference metadata (link to the reference metadata file – XLS/HTML/PDF/CSV)
- Unit of measure (number, %, rate, etc.)
- List of disaggregations (age, sex, activity, etc.)
- Level of territory (Kyrgyz, Regions, etc.)
- Data source (NSC,…)

This system should provide multilingual support. All indicator attributes must be coded according to the specified code list. Detailed list of indicator attributes should be defind with the NSC team within the Activity 1. The NSC responsability is to provide all code lists.

Example of the code list structure and its content is presented in Annex 4.

As one of the auxiliary services, Data vizualization tool should have the possibility to be connected to the „main NSC dissemination database" which will be subject of future projects (e.g .Stat Suite, KOSIS and etc. implementation project). The idea is to replace link on dinamic table file with appropriate query to the „main NSC dissemination database" in the future.

Auxiliary services/applications for Repository of Release and Events Calendar and Publication (including Press Releases, Spreadsheets, Timeseries, etc.)

Statistical information produced by NSC is published in the following formats: publication, press releases, spreadsheets, dynamic tables/timeseries (indicator Excel tables), etc., and should be in line with the Release Calendar. Therefore, according to the Release Calendar, the solution should provide dynamic content updates of the NSC website pages (HomePage, the webpage of statistical area/subarea, Publication Page, etc.) with the latest statistical information.

The following primary information to maintaining the Repository of Release and Events Calendar and Publication and produce relevant outputs for the website are:

- Statistical areas
- Statistical subarea
- Statistical survey

- Type of release (Event or type of publication - press release, publication, spreadsheet, dynamic table, etc.)
- Title
- Language
- Release date
- Release time
- Periodicity
- Reference area
- Reference period
- Reference year
- Data type
- Reason for changing release date

This system should provide multilingual support. All possible attributes should be coded according to the specified code list. Detailed list of attributes should be defind with the NSC team. The NSC responsability is to provide all code lists.

Example of the code list structure and its content is presented in Annex 4.

The Repository of Release and Events Calendar and Publication should be developed following the requirements specified in Subsection 6.7.

Auxiliary services/applications for the "Online Consultant" module should be developed following the requirements specified in Subsection 6.4.

Management of all auxiliary services/applications should be based on the „Shared SQL database" with one administration application following the requirements specified in Subsection 6.8.

Continuous interaction with the NSC team is a prerequisite to the successful result of the activity.

- **Activity 3**: Development and implementation of the NSC official website solution

Following the outputs of the previous activities, which the NSC project team accepted, the Consulting Firm will develop a new website.

Website development is expected to be performed at the Consulting Firm's location; acceptance of the website solution should be performed on NSC computers and software environment. The consulting firm is expected to set up (install) the appropriate software components on NSC's servers and computers necessary for operating the website. Website software and associated software components installation should not interfere with other systems that may be sharing the website server.

Delivery-acceptance of the website solution should be carried out in stages, following the work program and schedule agreed by the NSC and the Consulting Firm at the initial stage of the project. A team of designated NSC employees and representatives of the Consulting Firm will carry out delivery-acceptance of the website solution. The Consulting Firm shall deploy the project solution on the Client's servers at the stage of user acceptance testing of the project solution.

The developed solution deployed on the Client's hosting after the NSC project team completes the acceptance phase.

- **Activity 4**: Content migration from the old to the new NSC website solution

Considering that the functionality and content of the new official NSC website solution are highly dependent on the selected CMS for website administration and management, the Consulting Firm should prepare the plan and provide the content migration from the old to the new NSC website.

Within the framework of initial content migration the Consulting Firm transfers all content parts with all available indicators, methodologies, classifiers and other information from the current working site stat.gov.kg.

The Client is obliged to provide all necessary information for the initial content migration of the project. Text writing works are not the responsibility of the Consulting Firm. The Client provides all text and graphic materials required by the Consulting Firm, as well as comments concerning their content, volume, design and placement.

Requirements of information transfer format:
- All information must be transmitted electronically.
- The names of transmitted files should briefly express their contents.
- The text should be typed neatly, without excessive formatting and defects.

The content of the files should be clearly structured by sections of the site and contain sufficient information about the purpose of the transmitted information.

- **Activity 5**: Training sessions for the support staff, employees of the Department of Summary Works, Communications and dissemination of statistical information of the NSC and system administrators to perform content upload, system maintenance and administration

In terms of future responsibilities, such as performing content uploads, system maintenance, and administration of the new NSC website, the Consulting Firm should prepare a detailed user-maintenance and operational manual with as-made system layout/schematics and user-maintenance and troubleshooting procedures for the overall project and organize training sessions for the support staff, employees of the Department of Summary Works, Communications and dissemination of statistical information of the NSC and system administrators. If necessary, training sessions should be organized by different thematic groups. It is important to include training on regular data backup and recovery procedures to ensure data integrity and availability and develop and maintain an incident response plan to handle security breaches and other incidents effectively.

- **Activity 6:** Release of the new website (go live)

2.3. Estimated Duration

The proposed duration of this assignment is 26 weeks. It is expected that the Consulting Firm will begin its work in the first quarter of calendar year 2025.

3. Deliverables

It is expected that the Consulting Firm company will present the following deliverables during the implementation of the project. The total *estimated* project duration is six months (26 weeks):

No.	Deliverables	Estimated Time Schedule From Contract signing date (time T0)
1	Technical and functional specifications of the new NSC website	T0 + 6 weeks
2	The first working prototype of the new NSC official website and the design auxiliary services/applications and correlation among them	T0 + 9 weeks
3	CMS set up on the Client environment	T0 + 16 weeks

4	A new website solution, including auxiliary services/applications, set up on the Client environment	T0 + 20 weeks
5	Content from the current website transferred to the new website	T0 + 22 weeks
6	Specification of test cases for User Acceptance Test (UAT)	T0 + 24 weeks
7	User manual for support staff, employees of the Department of Summary Works, Communications and dissemination of statistical information of the NSC and system administrators to perform content upload, system maintenance and administration	T0 + 25 weeks
8	A detailed training plan and conducting training sessions for all users on website management, including auxiliary services/applications	T0 + 26 weeks
9	Project documentation	T0 + 26 weeks
10	Source code of the solution*	T0 + 26 weeks
11	Release (go live) of the new website	T0 + 26 weeks

*The developed solution will remain under the ownership of the National Statistical Committee of the Kyrgyz Republic.

3.1. Payment Schedule

Approved deliverables will be the basis for the payment schedule below. All reports will be submitted in draft (for comments) and the final.

No.	Deliverables	Payment Schedule in % of the total contract amount
1	Technical and functional specifications of the new NSC website	15%
2	The first working prototype of the new NSC official website and the design auxiliary services/applications and correlation among them	
3	CMS set up on the Client environment	25%
4	A new website solution, including auxiliary services/applications, set up on the Client environment	
5	Content from the current website transferred to the new website	20%
6	Specification of test cases for User Acceptance Test (UAT)	
7	User manual for support staff, employees of the Department of Summary Works, Communications and dissemination of statistical information of the NSC and system administrators to perform content upload, system maintenance and administration	40%
8	A detailed training plan and conducting training sessions for all users on website management, including auxiliary services/applications	

9	Project documentation	
10	Source code of the solution	
11	Release (go live) of the new website	
	TOTAL	**100%**

4. Reporting and approval procedures

4.1. Reporting requirements

The Consulting Firm shall provide the following reports in Russian and English:

No.	Name of report	Content	Time of submission
1	Inception Report	• Define the aims, objectives and methodology of the project and its results; • Present the completed and agreed Acceptance Criteria document between the Contractor Firm and the NSC; • Present recommendations to cater for changes introduced in the sector after the ToR were written; • Set out a detailed work plan for the provision of each activity, area of expertise and list of deliverables; • Identify the support personnel required for the management of the project.	No later than 2 weeks after the start of implementation
2	Monthly Report	• Summary of progress, problems encountered, deviation from planned activities, planned activities for the forthcoming month	No later than 2 weeks after the end of each month
3	Draft Final Report	• A short description of achievements including problems encountered and recommendations	No later than 30 days before the end of the project
4	Final Report	• Detailed description of the different activities and results, including all previously approved reports and other documents, to	No later than 30 days after the completion of the project

		permit an informed decision on its approval	

The Consulting Firm shall ensure that any reports required from actions within the project shall be delivered to NSC in a timely way. They shall also specify whether the objectives have been reached and give reasons for possible failure together with recommendations.

Other material - Materials such as source and executive codes of software and all documents supporting the software (specifications, models, instructions for installation, user guides and manuals, etc.), workshop materials, training modules programmes, Mission reports and other material produced during the project will be made available to the Contracting Authority.

All technical reports and documents supporting the software, user documentation, training material and documentation/material for the use of the Client will be provided in Russian and English.

4.2. Submission and approval of reports

The reports referred to above must be submitted to the project acceptance Commission and copied to the Project Manager for the implementation of projects of the World Bank Group and the designated staff member(s) of the Department of Summary Works, Communications and dissemination of statistical information and the Intellectual Data Cente, for review. The team will review all the reports and their comments will have to be reviewed; and actionable comments, mutually agreed by the Client and Consulting Firm should be acted on within 2 weeks from the date the comments were received. The Consulting Firm will have to provide justification if the comments are not included in the final project for developing and implementing the website and its documents.

NSC would determine the frequency of working meetings on the project. Working meetings will generally be held on NSC's premises (720033, Kyrgyzstan, Bishkek, Pervomaisky district, 374 Frunze Street). The Consulting Firm shall bear all costs associated with the participation of its representatives in workshops and the delivery and acceptance of rendered services.

5. Qualification requirements and tender evaluation and aword criteria

5.1. Qualification requirements

To be selected, the Consulting Firm must meet the following minimum qualifications requirements:
- Should have experience in the development of web projects, and especially in creating information systems related to data processing – at least 3 assignments. Official references to completed successful projects and letters of recommendation from Clients should support this.
- Previous work experience in statistical projects will be an advantage.
- Should have experience in at least 3 knowledge transfer engagements in software development and implementation, their maintenance, and skills in providing robust online or in-person training.
- Should have experience in implementing web projects and especially in creating information systems related to data processing. Official links to completed successful projects and letters of recommendation from clients should support this.

Technical proposal shall meet the following requirements for methodology/work plan and key

personnel:

The following range of scores awarded to each of the listed positions should be defined considering three sub-criteria and corresponding percentage weights:

- Adequacy and quality of the proposed methodology, and work plan in responding to the Terms of Reference (TORs) – 20 points.
- Key Experts' qualifications and competence for the Assignment – 80 points.

The team composition should include at least the following key experts with required qualifications. Numbers in parentheses shows the number of individuals estimated for the engagement:

No.	Position	General qualifications (relevant education, training, and experience)	General experience (overall work experience in the sector)	Specific experience (experience in the sector/similar assignments)
1	Project Manager (1)	Bachelor's degree or academic degree in computing or information systems, statistics/ economics or business management;	10 years' experience in managing software development operations.	Recent experience in the use of ICT technologies in one or more areas – software development, statistical data processing, data security Experience in projects with the relevant scope of work. The candidate must demonstrate a clear and professionally written resume, highlight the achievements and effectiveness of their communication efforts in projects, provide information about language skills and certificates. Fluency in spoken and written English, knowledge of Russian will be an advantage
		Bachelor's degree or academic degree in computing or information systems, statistics/ economics or business management.	At least 5 years of experience working with computer data processing systems.	Experience should _preferably_ be in the field of statistics or Socio-economic data, but experience with _data_ in the financial sector can be considered in its place.

2	Data Analyst (1)			Proven experience in software architecture design, applications development including web applications, and database design for large data bases Experience in using requirements documenting software tools/templates. Experience in projects beyond their home country in building and use of statistical data systems. Candidates must include in resume their involvement in projects, such as short project description, their role and responsibilities as well as organizations or clients reference letters. Fluency in spoken and written English, Russian. Knowledge of Kyrgyz will be an advantage.
3	Software Architect (1)	Bachelor's Bachelor's or Master's Master's degree in Computer Science or Information Technology or related field.	At least 7 years of experience in managing operations for the development of software for processing data in the field of statistics. 5+ years' years' experience in making high-level design choices and ensuring that the technical aspects of a software project align with the overall business goals and requirements.	Experience in designing software systems and creating architectural diagrams. This includes making decisions about technologies, frameworks, and platforms. Experience managing software projects, including defining project scopes and timelines. Experience with integrating different software components, systems, and services to create a unified and efficient

				software ecosystem. Experience in information security and performance of software systems would be a plus. The candidate must provide a detailed portfolio, including a description of the projects highlighting the architectural aspects, accompanied by documentation and achievements. It is also recommended to provide written recommendations from previous employers confirming successful informed decision-making in the field of software architecture. Fluency in spoken and written English and Russian, knowledge of Kyrgyz will be an advantage.
4	Full Stack Developers (2 persons)	Bachelor's or Master's degree in Computer Science or Information Technology or related field.	5+ years' experience in building web applications from scratch or contributing to existing projects using the chosen Full Stack At least 5 years of experience in managing operations for the development of software in the field of statistics	Expertise in interacting, including data modeling and CRUD operations. Strong skills in creating responsive and user-friendly web interfaces. Developing server-side logic, including creating APIs and handling server requests. Experience in projects beyond their home country is an advantage. Fluency in spoken and written English and Russian, knowledge of Kyrgyz will be an advantage.

5	UI/UX Designer (1)	Bachelor's degree in Computer Science or Information Technology or related field, or with course in Graphic Design and Multimedia.	7+ years of Experience in Graphic and Web Design.	Proficiency in industry-standard design tools (e.g., Adobe, Figma, Sketch). Strong understanding of responsive design principles. The candidate can demonstrate his skills in interface design through a detailed portfolio with a description of projects, participation in design challenges, recommendations and reviews. CV of the individual (s) must highlight the professional websites designed/implemented by him/her, including url links to such sites, if possible. Experience in projects beyond their home country is an advantage. Fluency in spoken and written English and Russian, knowledge of Kyrgyz will be an advantage
6	Technical Lead	Bachelor's or Master's degree in Computer Science or Information Technology or related field.	At least 5 years of experience in managing operations for the development of software for processing data in the field of statistics.	A Technical Lead should have 5+ years of hands-on experience in web development. This includes proficiency in front-end and back-end development, using Full Stack technologies, Deep understanding of both front-end and back-end development. Strong background in system architecture, design patterns, and

				best practices for creating scalable, maintainable, and efficient software systems. Fluency in spoken and written English. Knowledge of Russian and Kyrgyz will be an advantage.

5.2. Responsibilities of key experts

1. ***Project Manager***: Responsible for all aspects of solution implementation. In addition to providing high-level leadership to the project team(s), this role focuses on managing the working environment in which the solution is developed. The Project Manager coordinates all aspects of project management at a high level following an agile project delivery structure. The Project Manager will be responsible for both the business and technical aspects of project delivery, from project foundation to platform deployment.

2. ***Data Analyst***: Analyze data sources, ensure data consistency and visualization according to the solution database structure, and map data to visualization components.

3. ***Technical Lead***: Ensure that the Solution team functions as a cohesive unit and is fit for purpose. The Technical Lead will work with the team to plan and coordinate all aspects of platform delivery at a detailed level.

4. ***Software Architect:*** Provide high-level design development and technical aspects of the project. The Software Architect will gather and translate requirements, provide technical guidance, enforce best practices, address performance and security issues, and collaborate with cross-functional teams. The Software Architect will also evaluate technology and prototype designs.

5. ***Full Stack Developer***: Interpret business requirements and translate them into a deployable solution that meets functional and non-functional needs.

6. ***IU/UX User Interface Designer***: Provides an understanding of the design requirements, creates a layout design that encapsulates the visual representation of the project, translates the design into an HTML page layout, and carefully designs web and UI elements according to the approved layout.

6. General requirements for developing the new website solution

Functional Requirements:

6.1. Website navigation

The project solution should enable the following types of website navigation:

- Global navigation - navigation menu located on the header and footer (fast links) and visible on all pages of the website
- Secondary navigation menu - submenu
- Breadcrumb navigation

- Site map - a hierarchical list of all pages on the site
- Internal site search - a search engine which searches the entire website by number and title across all sections, by primary search results
- Fast links

6.2. Multilingual website

The project solution should provide multilingual websites in Kyrgyz, Russian and English.

The main version of the site, which opens by default, is the Kyrgyz version. Then the user can choose the language version he/she is comfortable with.

Language versions are displayed in the frontend of the system, for the convenience of users working with the site. All inscriptions of screen forms, as well as messages given to the user (except for system messages) must be in the language of the site selected by the user.

Translation of all content, all system and user files (including translations of navigation objects, function buttons and panels, etc.) into other languages is the responsibility of the Client. The translated strings should be in a database table that can be maintained by the "Administrator" using the admin panel. The Consulting Firm "enables" the new language version after receiving all necessary content.

6.3. The structure of the website menu

The preliminary proposed structure should take into account the existing structure of the current NSC website (https://stat.gov.kg/) and the one given in Annex 3.

1) **Mandatory elements for all pages of the website:**

The following elements must be present on every page:
- Organization logo (on internal pages serves as a link to the main page);
- Contact phone numbers in the "header" of the site;
- Global navigation;
- Secondary navigation menu;
- Breadcrumb line (except for the first page);
- Search field;
- Contact information - footer bottom of the site. The footer should also duplicate the top menu links;
- "Online Consultant" - linked tool for website visitors to get real-time consultative assistance which should be anchored in the bottom right corner;
- Link to Social media accounts of the NSC KG.

The website administrator should regulate the order and composition of the main menu, submenu, and footer menu directly from the website CMS.

2) **Main elements of the new website:**

The new website should contain the following main elements:
1. Internal site search (search engine, which searches the entire site, by number and title across all sections, by primary search results);
2. Search results page

   This page contains such elements as:
   - Search box with the query text
   - Search results list

   Search result list displays 10 results of a search query on a page with page navigation at the

bottom. The title, short description, date of change of the material, and the path to the material are displayed.

- ➢ Title - displays the title of the material, the title or brief description of which contains the keyword. From the title a link to the material itself is built.
- ➢ Short description - displays a brief description of the item, the title or short description of which contains the keyword.
- ➢ Date of change - the date when the material was changed.
- ➢ Path - the "navigation chain" is displayed, for example, "Home / News / Latest News".

3. Contact form or Feedback form;

Preceded by text. Example text: "You can comment on the work of our organization, ask your questions, as well as express your suggestions using the feedback form or by phone +*****. Fields marked with an asterisk are mandatory."

The feedback form has the following fields:

- ➢ "Your Name" field
- ➢ "Your e-mail address" field *
- ➢ The "Phone" field *
- ➢ The "Your Message" field *
- ➢ CAPTCHA

The message sent through the feedback form appears in the list of messages in the site management system and is sent to the office@stat.kg address as an e-mail with the subject "Message from the site".

The site control panel should enable management of the email address to which the messages are sent.

Upon form submition, the following message is displayed prominently on the page: "Your message has been successfully sent".

If there is no text in the "Your message" field, the following message is displayed prominently on the page: "Not all required fields are filled in".

"Feedback Questionnaire" is designed to improve the data dissemination activities of the National Statistical Committee of Kyrgyz Republic. For this purpose, visitors can fill in the questionnaire (To be provided during the development of the website), the data of which will be used for the following purposes:

- o Increasing the involvement of target user groups in the activities of official statistics;
- o Increasing the level of satisfaction of users;
- o Increasing the level of user awareness;
- o Obtaining valuable information and feedback on official statistics.

The system of **submission of appeals through the site** should be implemented as a type of feedback form module and have the following set of functions:

- After selecting a service and filling in personal data, the user should be able (without registration) to independently submit an appeal to the National Statistics Committee of the Kyrgyz Republic by filling in the appropriate appeal form;
- After making an appointment, the user should receive a notification on his/her e-mail box about the order and terms of consideration of his/her appeal.

It should also be possible to specify an error or an invalid value by pressing CTRL + ENTER after passing the CAPTCHA check:

✐Report a mistake. Select the desired text and press CTRL + ENTER

4. Useful links (portals of government agencies and other institutions);
5. Site map;

   The site map contains a hierarchical list of all pages on the site. It is generated automatically. When the site structure is updated, it is automatically updated.
6. Section for placing tenders and competitions;
7. Data visualization tool, to help the National Statistical Committee of the Kyrgyz Republic and researchers to prepare informed decisions based on statistical information, by creating graphs and dashboards for visual presentation of results. The data visualization tool will use data from „Shared SQL database". Data vizualization tool should have possibility to be connected to the „main NSC dissemination database" which will be subject of future projects (e.g .Stat, KOSIS and etc. implmentation project). Module design should be developed following the requirements specified in Subsection 6.5.
8. The "Online Consultant" module of the website of the National Statistical Committee of the Kyrgyz Republic, through which visitors can get advice in real time and through "chat bot" function. Module design should be developed following the requirements specified in Subsection 6.4.
9. A set of Banners on the website; a visual tool to effectively interact with site visitors, draw attention to key points and promote user awareness.

   A set of Banners should be harmoniously displayed in the structure of the website in three languages (Kyrgyz, Russian and English), with the availability of links to them and the download function, as well as with the ability to manage them through the **adminpanel**.
10. The "Publications" module: the design of which should be developed in accordance with the requirements specified in Subsection 6.6, which will be implemented in the section of industry statistics to which certain publications belong. In addition, there should be support in all three languages (Kyrgyz, Russian and English), with the availability of links to them and download function, as well as the possibility of their management through **adminpanel**.
11. Traffic statistics (metrics such as Google Analytics, Yandex Metrics, and others). Website analytics that measures the number of unique visitors, page views and user engagement, browsing depth, number of views, etc.;
12. The print version of the website page;

    The print version is implemented without creating a separate page (using CSS). The print version should not contain graphics (except for the logo) and navigation elements.
    The print version is implemented for all pages of the site and contains mandatory blocks: The Consulting Firm shall implement a functionality on the website whereby users can download PDF versions of all pages with mandatory blocks by simply clicking a designated button. This feature should ensure seamless accessibility to printable versions of content across the site, adhering to established standards and user expectations.
13. Page 404 – contains a message that the page the user is looking for was not found and a site map to help the visitor get to the section of the site they are interested in. There is no separate design for the 404 page, it will open like a normal content page with left/right menu blocks.

The website structure should provide data archiving for all information sections (news, events, key indicators, state programs, speeches, projects, and tenders).

A search engine optimization (SEO) plan should be considered while organizing the website content into logical subject groupings.

6.4. "Online Consultant" module

The "Online Consultant" module of the website of the National Statistical Committee of the Kyrgyz Republic is a tool for visitors through which they can get real-time consultative assistance either through direct contact with NSC representative, either through communication with "chat bot". Its main features that can be extended are:

- "Real Time Chat" where the user can communicate through a convenient chat directly with the specialists of the National Statistical Committee of Kyrgyz Republic;
- "Library of answers to frequently asked questions" allows to find the answer to a previously asked question and ask questions about statistics, data access and methodology to get an expert answer;
- "Site Navigation" allows you to get searchable help in using the functions and features of the National Statistical Committee of Kyrgyz Republic website, as well as necessary documents and reports, by requesting directly in the chat room;
- "Personalized Consultations" (electronic reporting queries) for special requests and requirements;
- "Multilingual Support" allows communication in multiple languages (Russian, Kyrgyz, English) and assistance to ensure accessibility to a diverse audience;
- Possibility to show the results of a query in a graphical representation, including the display of several statistics during an open call to an online consultant;
- "Notifications and Alerts" offers to subscribe to notifications about new releases and changes in methodologies;
- "Interactive Training Materials" allows access to training materials and instructions to improve statistical literacy;

6.5. Requirements for the Data Visualization Tool

The data visualization tool of the National Statistical Committee of the Kyrgyz Republic should provide a wide range of functions for statistical data management and analysis. Here is the detailed description of each of the main functions:

1) Data storage and organization:

Data visualization tool will represent data from „Shared SQL database" that will be designed as a common repository of all data/information needed within the website solution. This approach will ensure the new site pages are updated effectively and on time with statistical information from the "one-stop-shop" database.

As one of the auxiliary services, Data vizualization tool should have possibility to be connected to the „main NSC dissemination database" which will be subject of future projects (e.g .Stat Suite, KOSIS and etc. implementation project).

2) Visualization:

This function should provide tools for data visualization, including the creation of graphs, charts, and other graphical representations (pies,…).

3) Data export:

This feature will allow to export data to various machine-readable formats such as XLS, XLSX, CSV, JSON, XML, SDMX, eSDMX and TXT to allow additional analysis and use of the data in other applications. In addition, if needed, there is the option to download information in the following formats: PDF, HTML, JPG/JPEG/PNG.

4) Filtering:

This feature will allow the administrator to apply various filters to get narrow and precise information according to specific criteria.

5) Integration with other systems:

The data visualization tool should be able to integrate with other databases if needed.

In addition, additional functions should be implemented:

6) Support for interactive dashboards:
   Administrator able to create interactive dashboards that will allow users to track key metrics in real-time and interact with the data through a dashboard interface.
7) Automation of updates:
   Will provide automatic updating of data and indicators in visualization tool charts established by the National Statistical Committee of the Kyrgyz Republic, which will ensure the relevance of the information.
8) Optimize the performance of the data visualization tool:
   Will provide improved performance and speed of data access of the data analysis and visualization tool to ensure fast and efficient analysis of all displayed statistical data.

6.6. Publications module

This module contains the possibility to view the following information blocks on the website, which can be extended during the development of the website. Module structure:

- Header
  - Subheading
- Publication information
  - Publication (downloadable document)
  - Release date
  - Next release date
  - Information about corrected data in the publication
- Key data of the publication
  - A block consisting of the key data that is covered in the publication
- Information
  - Link to spreadsheets and dynamic tables
- Dynamics of data published in the publication
  - Table with published indicators within the publication
- Glossary of the publication
- Methodology
  - Description of methodology
- Links to related publications
- Useful Links

Navigation of this module provides display of information about the block name on the left side with convenient transition by blocks (preliminary design is indicated by the link in Annex 1).

6.7. Requirements for Repository of Release and Events Calendar and Publication

Repository of Release and Events Calendar and Publication should provide all information for maintaining and publishment:

- Release and Events Calendar
- Publication by different types of publication, statistical areas/subareas, reference period and/or release period, etc.

The following information necessary within the Repository that should provide main information for each release on the new NSC website are:

- Title*
- Type* - CL_Type of release (event or type of publication)
- Cover image of the publication
- Headline for news*
- Link on PDF/XLS/HTML file*
- Statistical area*- CL_Satistical Area

- Statistical subarea - [CL_Satistical Subarea](#)
- Language*
- Planned Release date*
- Planned Release time*
- Real Release date*
- Real Release time*
- Source* - CL_institution (institutions of the Kyrgyz NSS)
- Editor/Author
- Periodicity* - [CL_periodicity](#) (monthly, quarterly, annual, etc.)
- Reference area (data level)* - CL_reference area (Kyrgyz Republic, Regions,...)
- Reference period* - [CL_reference period](#) (list of months, january-..., quarters, not applicable)
- Reference year*
- Data type* - [CL_data type](#) (final, preliminary, estimates,....)
- Reason of changing release date
- Responsible person

Fields marked with an asterisk(*) are mandatory.

According to the information in the Repository of Release and Events Calendar and Publication, it is recommended that when opening the release calendar, information about the data/publication release for the current month should be displayed. More precisely, up to the current date and time, titles with links to the published content should be displayed, and for upcoming publications, their schedule following the release calendar.

In case of a change in the release date, the calendar should be updated with additional release input for a new date. In accordance with the set dissemination rules information about the change in the release date should be indicated on both dates (originally planned and the new one) with possible different textual descriptions. The same approach should be applied in case of unplanned revisions (data corrections). On the other hand, in case of unplanned data/publication release and/or a complete cancelation of data/publication release, the calendar should be updated with additional release input for a set date. All of these activities should be marked with an "info" symbol with information that appears when hovering over the tooltip.

When displaying release calendar, the forms of data publication should be clearly marked (publication, bulletin, dynamic tables, spreadsheets, etc.). Given that the NSC has different forms of data releases, due to a smaller display load, a symbol could be used. It is necessary to enable filtering by type/forms of data releases, where the information is also counted as one type (changes overview, revisions overview).

6.8. Requirements for site solution administration and management system, adminpanel

Adminpanel is consisted of several Admin "points":

- Control Panel of website CMS (Content Management System)
- Admin applications for auxiliary services / applications.

Control Panel - a system for managing the content and settings of the site, which allows administrator to manage the structure, text and graphical content of the site, set settings for the entire site or its individual sections or modules, manage users.

The provided system must contain a built-in text editor for formatting page content, performing typical content operations without knowledge of HTML markup language:
The content management system shall have a standard Windows interface that meets the following requirements:

- implementation in graphical window mode;
- uniform design style;

- intuitive use of interface elements;
- display on the screen only those features that are available to a particular user;
- displaying on the screen only the information necessary to solve the current application task;
- display on the screen the progress of lengthy processing processes;
- the dialog with the user should be optimized for performing typical and frequently used operations;
- for mass data entry operations, the number of keystrokes to perform standard actions should be minimized.

Access for web site content management is available to users who have been issued a login and password to enter **Control Panel**.

The site content management system should enable the site administrator to perform the following actions:

- Adding, editing and deleting texts (articles, news, static content, publications, vacancies, purchases (tenders));
- Adding, editing and deleting categories with the possibility to design the category of statistics as desired by the branch department of the National Statistical Committee of the Kyrgyz Republic;
- Adding, editing and deleting sections with the possibility to design the statistics section as desired by the branch department of the National Statistical Committee of the Kyrgyz Republic;
- Editing metadata of sections (service information to improve indexing of the Site by search engines).

Admin applications for auxiliary services / applications - a system for managing the content and settings of the auxiliary services / applications, which allows management of the structure, text and content of the auxiliary services / applications, as well as „Shared SQL database".

This part should enable the site administrator to perform the following actions:

- Adding and deleting indicators with the possibility of uploading documents in different formats (xls/xlsx/csv) and designating them by categories and sections of the site, in addition, when uploading a document there should be a visualization function with an approximate view of the indicator. Where the user can look at the correct filing of the document by visualizing the graph;
- Adding, editing and deleting Methodologies, with the ability to upload documents in various formats and designate them by categories and sections of the site;
- Adding and deleting dynamic tables with the ability to upload documents in different formats and designate them by categories and sections of the site;
- Adding, editing and deleting express information with the ability to upload documents in various formats and designate them by categories and sections of the site;
- Managing metadata on specific indicators/sections/categories;

6.9. Access delimitation and rights of website solution users

The information posted on the site is publicly available. Website solution users can be divided into 6 types, according to their access rights:

1. Visitors

Visitors only have access to the public portion of the site.

2. Respondents

A respondent from a production company accesses the NSC website, where he/she is also able to complete the reports in the eReporting system, which can be accessed through a link on the

website.

3. Moderator (Content Policy)

For the moderator role it is necessary to provide functions such as: Data Quality Control (the moderator is responsible for quality control of statistical data and reports, checking them for accuracy and compliance with standards). Content moderation (the moderator checks and approves or rejects proposed content, including indicators, values, texts, dynamic tables, graphs and other elements). Formatting standards compliance (moderator ensures that formatting and data structure standards are followed, assisting editors and users as needed). Feedback analysis (the moderator analyzes feedback from users and editors to identify potential problems and improve the quality of data and information).

4. Editors (Sectoral departments that populate their information)

The Consulting Firm shall provide an intuitive and user-friendly editing interface that will allow editors to: edit the content, including adding, deleting, and modifying sector indicators; make changes to metadata, including data description and structure; add, update, and delete data within dynamic tables, build charts and other visual elements; manage data access rights and set visibility for corresponding subordinates. Editors should be able to publish data and reports with a choice of access (public, restricted access, etc.) and ensure that information is up to date.

5. Middle and senior managers (access for country leaders to display key macroeconomic indicators for the reporting period. The design layout is specified in Annex 1):

It is necessary to develop a section with controlled access as separately designed page with a user-friendly interface specified in Annex 1/Country Management Access to provide detailed summary information on each statistical sector with specific indicators (the list of sectors and indicators should be agreed with the National Statistical Committee of the Kyrgyz Republic).

6. Administrator

Access to the administrative part is granted to users with moderator, editor and administrator rights. Editor can edit materials of the sections.

The Administrator can perform all the same actions as the Editor, and in addition:

- add users with Editor privileges;
- add and delete site sections.

Access to the administrative part should be carried out using a unique login and password. Login is issued by the site administrator. Password is generated automatically and sent to the user to the address specified during registration. For the first time when trying to enter the administrative part, the system should offer the user to change the password (manually enter a new password).

To enter the working cabinet, the administrator and all the roles mentioned above are provided with a single-entry point, such as http://stat.gov.kg/admin or another link at the Client's discretion. Access to the system is provided only by authorized users of the site and their roles with personal login/password or through the use of eKyzmat/ESI. Access to the system for each user of the organization's website should be set individually, excluding the possibility of transferring passwords to other persons.

If necessary, access to the system can only be provided via specific IPs.

Roles must be managed entirely on the Client's side.

Full logging of operations with indication of employee login and date-time of the operation must be provided. The history of changes to records and individual fields should be saved (indicating the history of previous values). Enabling/disabling this feature for specific entities/fields should be available to the administrator.

Non-Functional Requirements:

6.10. Requirements to protect the solution from unauthorized access and security requirements

Unauthorized access

The system must provide protection from unauthorized access both in the user part (frontend) and in the administrative panel of employees by:

- User identification;
- Verification of user authorizations when working with the system;
- Distinguishing user access rights at the level of performed tasks
- It is necessary to provide the impossibility of simultaneous logging in to the system 2 times by one user from different workstations;
- All actions of any user should be saved in the system log;
- The system must contain redundant information in the database to restore integrity in case of failure or intentional malicious actions of users;
- In case of deliberate malicious user actions (password selection, input data substitution, attempt to open pages not intended for the user), the system shall block the user with a corresponding message and contacts of an authorized person, as well as notify the system administrator of suspicious user behavior;
- Must be created and stored backup system for each day of the past week, for each week of the month, and each month of the year (this requirement applies to hosting, not to the functionality of the site).

The protected part of the system containing confidential information about users (administrative part) must use "blind" passwords (when typing a password, its characters are not displayed on the screen or are replaced by one type of characters; the number of displayed characters does not *correspond to the length of the password*).

Security requirements

Security issues of information storage and data access are solved by means of the supplied system and organizational measures taken by the Client to ensure security.

The Client should not allow access to the system to persons who have nothing to do with the filling of the site, or provide them with any non-public information about the system - it contradicts the requirements of the site security. It is recommended to store access passwords in a safe place.

The Consulting Firm shall be integrating the website control panel into a single identity system that provides secure authentication of all users who log into the control panel as well as the entire website.

The Consulting Firm cannot (and will not) be responsible for the security of information storage in case the Client has distributed to anyone access data - login/password (of the Client's employees) to the system or other confidential information about the project, including project documentation.

The Consulting Firm should implement protection against mass/batch downloading of forms.

6.11. Layout, cross-browser compatibility and viewing from mobile devices, additional elements of the site interface

The site should be designed for standard screen resolutions.
The site shall be correctly viewed from mobile devices (smartphones, tablets) and displayed in an adaptive or responsive layout at the Client's choice.

Built HTML templates for the site should be visually identical to the layouts approved by the Client.

The main screen resolutions for which the website should be responsive:

| DESKTOP | LAPTOP | TABLET | SMART PHONE |
| 1920x900 | 1280x980 | 1024x768 | 360x640 |
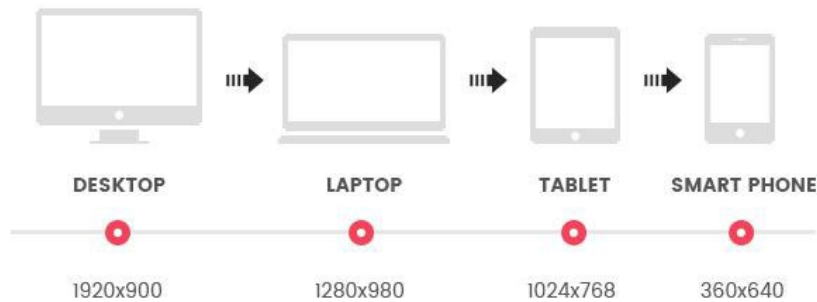
Site pages must be adequately viewable (i.e., identical to the layout and free of visible defects) in the following browsers:

- Microsoft Edge Browser from version 116.0
- Google Chrome from version 117.0;
- Apple Safari, starting from version 14.0.

To access the site, the client must have an Internet connection, a minimum connection speed of 512 Kbps is required for satisfactory operation.

6.12. Software requirements

It is recommended to use the following programming, query and markup languages when developing the site: MS .Net, MS SQLServer, Python, JavaScript (React/Vue).

6.13. Domain names

During the development of the project, the Consulting Firm undertakes to provide the Client with a temporary test domain and hosting for placing the website, its testing and acceptance.

Obligations to purchase a working domain name and hosting for the period of further operation of the website lie with the Client.

6.14. Hosting requirements

The operation of the site must be resistant to any operations performed by means of the user interface. The site functionality must function smoothly under the load of up to 1500 user requests to any of its functions per second on the Client's server platform.

The server software shall be agreed with the Consulting Firm, based on the platform / programming language selected for the system creation.

Recommended (to be agreed with the Consulting Firm) technical characteristics of the Client's server:

1. 10 gb disk space. / unlimited traffic;
2. RAM - starting 4 GB or more;
3. Processor - starting with 3 vCPU cores or more;
4. MS SQLServer, Python, Microsoft DotNet, C#, Excel/VBA
5. Mail protocols - POP3, IMAP, SMTP
6. Support
7. Backup
8. Access to log files
9. Directory Passwording

10. File manager
11. Own error pages
12. Database management interface

The site will function in network multi-user mode. The system performance depends on the hosting chosen by the Client.

6.15. SSL certificate

It is necessary to provide information on the personal information protection policy and specify information on security certificates on the developed website.

The obligation to purchase an SSL Certificate is imposed on the Client, the obligation to install the SSL Certificate purchased by the Client is imposed on the Consulting Firm, or the Consulting Firm may offer an open-source SSL Certificate of its choice, but with the condition of finalizing the unique encryption to ensure the security of the site and all data inside.

Installation of SSL-certificate on the site implies not only activation of the certificate itself, but also related work on the site: setting up redirection of requests from http to https, as well as adjusting the absolute and relative internal links of the site.

It is recommended to purchase either Domain SSL (initial level of trust) or Organization SSL (business level of trust).

6.16. Requirements for optimization of the site in search and analytical systems (SEO)

The site content management system should provide the ability to edit for the site as a whole such parameters as:

- Titles, Description, Keywords, top-level header (H1);
- the specialist should be able to edit files that are not directly related to the administration system, but are important for indexing: robots.txt, sitemap.xml.

Meta-tags and site content should be optimized by the Consulting Firm at the final stage of development to ensure promotion of the site, by keywords (to be provided by the Client separately) in search engines.

Counters of analytics systems on the site

To obtain advanced statistics, the Consulting Firm shall install and configure counters of web analytics systems Google Analytics and information retrieval systems.

To get access to the counters, the Client will need to inform the Consulting Firm of his @gmail.com email accounts. The counters will be installed when the site is transferred from the test site to the main domain.

6.17. Requirements for reliability, data backup and recovery

Reliability requirements

The method of data storage in the site system shall be based on modern relational or object-relational DBMSs.

Built-in DBMS mechanisms shall be used to ensure data integrity. DBMS tools, as well as the tools of the operating systems used, shall ensure documentation and logging of the information processed in the system. Access to data shall be granted only to authorized users, taking into account their authority and the category of information requested.

The structure of the database should be organized in a rational way, excluding one-time complete unloading of information contained in the database of the system. Technical means providing

information storage shall use modern technologies that allow to ensure increased reliability of data storage and prompt replacement of equipment (distributed redundant data recording/reading; mirroring; independent disk arrays; clustering).

Requirements for multi-user operation mode

The System shall provide simultaneous work of users. Each user shall be assigned rights to perform operations and access information in the System.

Site performance and scalability

The site should provide for the possibility of scaling in performance and volume of processed information without modification of its software by modernization of the used complex of technical means. Consulting Firm should be providing vertical scaling where databases or processing power is increased or decreased as needed. This can be accomplished by changing the performance level or by using elastic database pools that provide automatic adaptation to workload requirements.

Ergonomics requirements

The site response time to a user action should not exceed 3 seconds.

Backup & recovery and incident response procedure

Consulting Firm needs to define regular data backup and recovery procedures to ensure data integrity and availability.
Consulting Firm needs to develop an incident response plan to handle security breaches and other incidents effectively and to train the NSC how to maintain this plan.

7. Compliance of the website with legal requirements and international open data policies

7.1. Legal Requirements

The website developed by the Consulting Firm shall comply with the requirements of the applicable legislation, including:

- Order of the Cabinet of Ministers of the Kyrgyz Republic "Requirements for Websites of State Bodies and Local Self-Governments of the Kyrgyz Republic" dated February 17, 2023, No. 59-r (reference: http://cbd.minjust.gov.kg/act/view/ru-ru/219469?cl=ru-ru)
- Law of the Kyrgyz Republic "On Official Statistics" of July 8, 2019, No. 82 (reference: http://cbd.minjust.gov.kg/act/view/ru-ru/111929#:~:text=Law%20KR%20of%208%20July,No%2082%20 "On%20Official%20Statistics"&text=action%20of%20this%20Law-,1.,production%20and%20dissemination%20of%20official%20statistics.);
- Law of the Kyrgyz Republic "On Access to Information under the jurisdiction of State Bodies and Local Self-Governance Bodies of the Kyrgyz Republic" (In edition of the Laws of the Kyrgyz Republic dated February 19, 2013 #22, February 18, 2014 #35, July 27, 2016 #152, December 29, 2016 #224, March 18, 2017 #47, July 20, 2017 #130, June 30, 2022 #53) (reference: http://cbd.minjust.gov.kg/act/view/ru-ru/202010?cl=ru-ru)
- Law of the Kyrgyz Republic "On Electronic Governance" of July 19, 2017, No. 127 (reference: http://cbd.minjust.gov.kg/act/view/ru-ru/111634?cl=ru-ru);

The Consulting Firm shall consider the requirements of the legislation and develop the site in accordance with the requirements, including, but not limited to, the following items:

- accessibility of the site for visually impaired citizens, including:
  - a service to read the content of the site and information explaining about this service;

a function to customize the size, look, color, font and contrasting background of the site, and information explaining about such customization functions

 - header icons
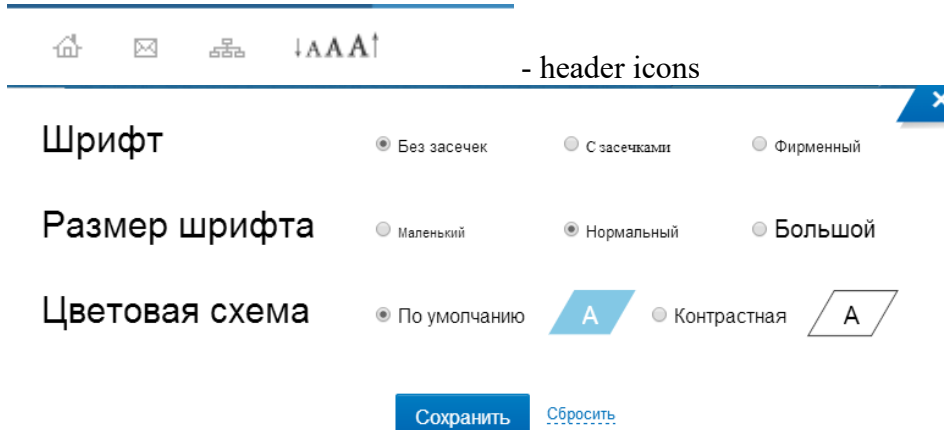
Example of implementation of additional facilities for visually impaired citizens

- website accessibility for people with visual impairments
- availability of a mobile version of the website;
- placement of forms and blanks, electronic documents on the website;
- interactive services:
  - appeal of individuals and legal entities;
  - reception by management;
  - job openings and sending resumes
- questions and answers to frequently asked questions;
- placement of links to the websites of state bodies and higher organizations specified in the Cabinet of Ministers of the Kyrgyz Republic "Requirements for the websites of state bodies and local self-government bodies of the Kyrgyz Republic" Order No. 59-r dated February 17, 2023. The Consulting Firm should implement a mechanism to check the validity of links and alert if they are missing.

7.2. International open data policies

The new website must comply with the requirements of international open data policies (one of which is the Open Data Inventory Organization: https://odin.opendatawatch.com).

These formats allow presenting information in structured form, which facilitates automatic processing and analysis of data. Mandatory machine-readable data formats that are recommended to be maintained on the website of the statistical office include: XLS, XLSX, CSV, JSON, XML, TXT, SDMX, eSDMX. There are also *optional* machine-readable formats such as: PDF, HTML, JPG/JPEG/PNG.

Support of these mandatory and optional machine-readable data formats on the official website of the statistical office will allow the users to easily obtain and process data for further analysis, research and integration with other systems.

Website Design Layout

A proposal for all website pages and functionality layouts can be found at the link below**:**

https://www.figma.com/file/w0DyfYUXgir0MIxJn8hELv/Stat.kg-%7C-English-version?type=design&node-id=0%3A1&mode=design&t=7fuS1Y6mAKBty73z-1

РУКОВОДСТВО
ПО ИСПОЛЬЗОВАНИЮ ФИРМЕННОГО СТИЛЯ НАЦИОНАЛЬНОГО СТАТИСТИЧЕСКОГО КОМИТЕТА

ЛОГОТИП

Круглая форма выбрана не случайно. Она означает централизованность сбора данных. Небесно-голубой тундук говорит о высокой государственной значимости и чистоте работы коммитета. Чуть ниже расположена диаграмма, символизирующая статистические данные, а также увеличивающиеся слева направо столбики показывают рост и положительную динамику, что подчеркивается кривой роста со стрелкой.

Данные цвета наносятся любым способом печати. Одинаково выглядит как на печатной продукции, так и на мониторах и экранах различных устройств. Однако при возможности рекомендуется использовать при печати пантон, т.к. это придаст печатной продукции наиболее интересный и индивидуальный вид. Так же можно использовать тиснение золотой фольгой. Тем не менее пантон подобран таким образом, чтобы при печати по CMYK разница была минимальной.

Круглая форма даёт возможность использовать его в качестве иконки для мобильного приложения (при необходимости), фавиконки для сайта, изготовления нагрудного значка и т. д.

Логотип благодаря своим элементам может быть легко изготовлен любым способом. Будь то печать, объёмная конструкция, лазерная резка, лайтбокс и т.д.

ЯЗЫКОВЫЕ ВЕРСИИ ЛОГОТИПА

кыргызский язык

английский язык

русский язык

Языковые версии исполняются на основе базовой версии (на кыргызском языке). Для написания названия организации используется шрифт DIN Pro Regular. Направление текста должно повторять базовую версию. Написание должно быть в два предложения, т.о. исключается перевернутое написание текста. Написание происходит в одном направлении (в предоставленных версиях - слева направо), с учетом особенностей написания на конкретном языке. Все остальные элементы логотипа, включая цвета и размеры отдельных элементов остаются неизменными.

МОНОХРОМНЫЕ ВЕРСИИ ЛОГОТИПА

Логотип может быть использован как в цветном, так и в черно-белом вариантах. Однако предпочтительнее использование в оттенках серого. Также возможно использование целиком в одном из базовых цветов. Таким образом он останется целостным, узнаваемым, не зависимо от размера, способа отображения или нанесения на поверхность.

версия в оттенках серого

черно-белая версия

версия в оттенках основного цвета

версия в базовом цвете

инверсия

частичная инверсия с оттенками серого

частичная инверсия с цвктными элементами

При использовании на цветных подложках применяются инверсные версии логотипа. Предпочтительнее всего использование варианта без оттенков. Но применяя на насыщенных темных фонах допускается использование вариантов с оттенками серго либо с цветными элементами.

ПРАВИЛА ПРИМЕНЕНИЯ ЛОГОТИПА

МИНИМАЛЬНЫЙ РАЗМЕР

Минимальные требования к размеру контейнера логотипа основаны на разборчивости названия организации.
Минимальный диаметр контейнера кыргызской версии составляет 22 мм для печатной продукции и не менее 100px для веб-сайтов. Для всех других языков минимальная ширина должна обеспечивать разборчивость названия при чтении.

В разичных дизайн-макетах идеальное положение контейнера логотипа — вверху справа. Также можно применять альтернативные положения, как показано справа.

Эти положения повышают согласованность и читаемость, особенно когда логотип размещается поверх изображений и графики — и они применяются к разным форматам (книжный, альбомный, квадратный и т. д.).

При выборе положения, обязательно следует придерживаться поля безопасности (см. на следующей странице).

22 мм

22 мм

минимальный размер

минимальный размер в масштабе 1:1
(для печатной версии руководства)

22 мм

минимальный
размер
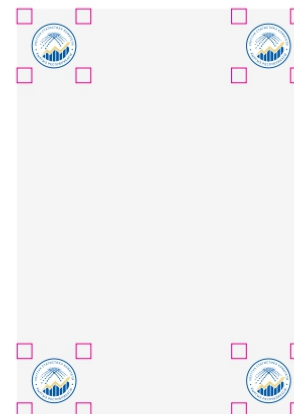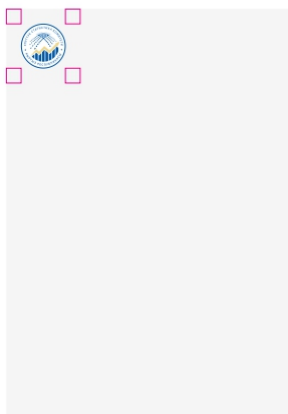
ПОЛЕ БЕЗОПАСНОСТИ ЛОГОТИПА

Следуйте рекомендациям по размещению и размеру логотипа, включая свободное пространство, чтобы логотип сохранял сильное присутствие.

• При размещении логотипа используйте поле безопасности, для сохранения визуальной читаемости. Оно должно составлять ⅓ от ширины самого логотипа.

• Логотип НСК должен быть равным по размеру по сравнению с логотипом партнера. Логотип НСК может быть использован в меньшем размере только относительно логотипов вышестоящих структур или герба Кыргызской Республики.

• При размещении двух и более логотипов в одном пространстве необходимо соблюдать отчетливое разделение друг от друга, избегая появления видимости объединенного (совместного) логотипа. Для этого необходимо соблюдать отступ от соседних логотипов не менее 1,2 от текущей ширины логотипа НСК.

• Если логотип партнера имеет вытянутую форму, размер следует подбирать так, чтобы визуальное заполнение было равным и не вытесняло присутствиие логотипа НСК.

ФОРМА
И ПОЛОЖЕНИЕ

Логотип должен использоваться без искажений формы. Рекомендуется использовать готовые файлы и цветовые решения прилагающиеся к настоящему руководству.

Не удаляйте внешнюю линию

Не удаляйте текст и другие элементы

Не растягивайте и не сжимайте логотип

Не искажайте форму любым другим способом

Не наклоняйте и не переворачивайте относительно ориентации дизайн-макета

Не текстурируйте логотип или его элементы

Не добавляйте какой либо текст или графические элементы по периметру логотипа

Не изменяйте цвета логотипа в целом или цвета его отдельных элементов, за исключением случаев описанных на стр. 7.

Не используйте тени, свечение или другие эффекты на логотипе
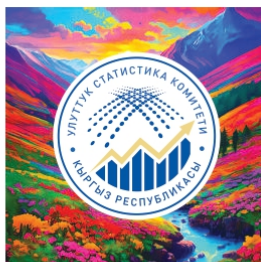
При использовании поверх фотографий или других изображений необходимо подложить белую плашку диаметр которой должен быть больше логотипа на 2 толщины внешней линии.

Не располагайте поверх фото и других изображений без использования плашки

Не располагайте монохромную версию поверх пёстрых фото и других изображений если это влияет на читаемость логотипа или его элементов

Не используйте тени, свечение или другие эффекты на логотипе для придания ему контраста относительно фона
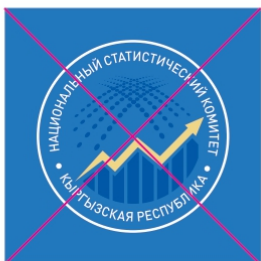
Не используйте вариант с частичной инверсией на фонах с цветами близкими к цветам логотипа

Не меняйте оттенки и не добавляйте прозрачность отдельным элементам логотипа. Используйте только предоставленные версии

Поверх фотографий логотип должен располагаться так, чтобы это не влияло на его читаемость

Не используйте на фото версию с частичной инверсией

ФИРМЕННЫЕ ЦВЕТА

БАЗОВЫЕ ЦВЕТА

Первичный синий цвет дополняется двумя нейтральными цветами: золотистым и черным. Сочетая первичный цвет с нейтральными, мы привлекаем внимание к нашему основному цвету и усиливаем связь основного цвета и организацией. Доминирующее использование Первичного цвета делает нас легко узнаваемыми среди многих других.

Руководящие принципы применения цвета

Цвета нельзя изменять. Их нельзя осветлять, затемнять или использовать прозрачность. Оттенки можно использовать только при визуализации данных в диаграммах и на внутренних страницах публикаций (см. соответствующие разделы).

Синий цвет должен присутствовать во всех сообщениях и быть доминирующим цветом.

При использовании сочетания синего и золотого, следует придерживаться соотношения не более чем 5:1. Где 5 частей синего и 1 часть золотого цвета.

Черный не должен доминировать в цветовой схеме, если только не требуется мрачное выражение. Акцентные цвета никогда не должны преобладать над основным цветом.

Первичный
Pantone® 280 Whale Blue
C100 M66 Y0 K7
R0 G89 B63
H207 S100 B64
#0059A3

Нейтральный
Pantone® P 7-14 C
C0 M12 Y66 K10
R233 G200 B105
H45 S55 B91
#E9C869

Нейтральный
Pantone® Black
C0 M0 Y0 K100
R0 G0 B0
H345 S10 B15
#231F20

ДОПОЛНИТЕЛЬНЫЕ ЦВЕТА

Дополнительные цвета должны использоваться внимательно и аккуратно.
Они должны дополнять основной цвет, не подавляя его.
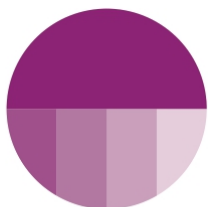
Pantone® 512 C
C50 M100 Y15 K10
R138 G36 B114
H314 S74 B54
#8A2472
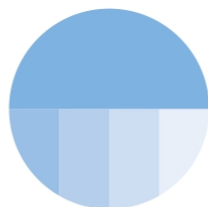
Pantone® 273 C
C55 M19 Y0 K0
R121 G175 B223
H208 S45 B87
#79AFDF

Pantone® 311 C
C63 M0 Y12 K0
R90 G193 B222
H193 S60 B87
#5AC1DE

Pantone® 3268 C
C100 M66 Y0 K7
R170 G100 B66
H207 S100 B64
#00A98F

Pantone® 376 C
C50 M0 Y100 K0
R152 G192 B61
H78 S68 B75
#98C03D

Хотя наш основной цвет — синий, мы также используем ряд вторичных цветов для поддержки наших визуальных материалов.

Вторичные цвета полезны в особых ситуациях, таких как привлечение внимания, акцентирование, призывы к действию, текстовые поля в отчетах и презентациях, контейнеры вокруг цитат и важных сообщений в социальных сетях и публикациях, а также графические решения, такие как диаграммы и инфографика.

Pantone® 158 C
C100 M66 Y0 K7
R237 G118 B37
H24 S84 B93
#ED7625

Pantone® 143 C
C3 M32 Y0 K91
R35 G31 B32
H39 S79 B95
#F5B335
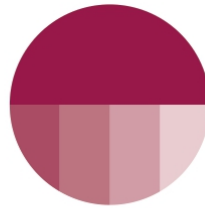
Pantone® 221 C
C31 M100 Y53 K20
R150 G26 B75
H336 S82 B58
#960048
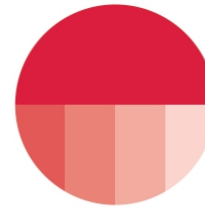
Pantone® 206 C
C10 M100 Y78 K2
R213 G0 B55
H350 S85 B83
#D50037
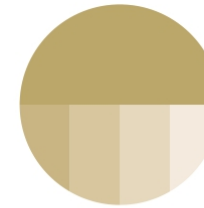
Pantone® 4515 C
C31 M31 Y68 K2
R180 G162 B105
H45 S42 B70
#B4A269

ШРИФТЫ

DIN Pro

Наш основной шрифт - DIN Pro. В гарнитуре шрифта по 20 начертаний представленных справа. Его можно подключить через сервис Google Fonts. Шрифт обладает более чем 500 глифами для широкого спектра языков. DIN Pro входит в семейство шрифтов без засечек FF DIN, которое Альберт-Ян Пол создал в 1995 году. Он взял за основу немецкие стандарты DIN-Mittelschrift и DIN-Engschrift, которые входят в общий стандарт DIN 1451, и были определены еще в 1931 году. Кроме латинского, DIN Pro поддерживает кириллическое и греческое начертания, в.т. присутствует поддержка кыргызского языка для всех начертаний.

Light	Condensed Light
Light Italic	*Condensed Light Italic*
Regular	Condensed Regular
Italic	*Condensed Italic*
Medium	**Condensed Medium**
Medium Italic	***Condensed Medium Italic***
Bold	**Condensed Bold**
Bold Italic	***Condensed Bold Italic***
Black	**Condensed Black**
Black Italic	***Condensed Black Italic***

Для набора основного текста следует использовать начертание Regular или Light. Если есть необходимость использования наклонных или полужирных начертаний, следует придерживаться логической связки.

Light / Regular

К примеру, если основной текст набирается начертанием Light следует использоват:

Light – *Light Italic* – **Medium**

основное — наклонное — полужирное

Если же основной текст набирается начертанием Regular следует использоват:

Regular – *Italic* – **Bold**

основное — наклонное — полужирное

Condensed

Начертания из категории Condensed не следует использовать для набора основного текста, но рекомендуются при вёрстке таблиц, графиков, диаграмм и подготовке инфографики.

Аа Бб Вв Гг Дд Ее Ёё Жж Зз
Ии Йй Кк Лл Мм Нн Оо Пп Рр
Сс Тт Уу Фф Хх Цц Чч Шш Щщ
Ъъ Ыы Ьь Ээ Юю Яя
1 2 3 4 5 6 7 8 9 0

Аа Бб Вв Гг Дд Ее Ёё Жж Зз
Ии Йй Кк Лл Мм Нн Оо Пп Рр
Сс Тт Уу Фф Хх Цц Чч Шш Щщ
Ъъ Ыы Ьь Ээ Юю Яя
1 2 3 4 5 6 7 8 9 0

ВИЗУАЛИЗАЦИЯ ДАННЫХ

ЗАГОЛОВКИ

Общепринятое обозначение заголовков — H + цифра. Чем старше заголовок, тем меньше цифра. Так, заголовок H1 всегда находится в начале раздела, а заголовки младшего уровня (H2, H3, H4...) — внутри материала.

Задача заголовков — структурировать материал на странице. Так он быстрее считывается, в нем легче ориентироваться и искать информацию.

Печатные материалы

H1, 28/32 pt **Заголовок первого уровня**

H2, 22/24 pt **Заголовок второго уровня**

H3, 16/18 pt **Заголовок третьего уровня**

H4, 12/14 pt **Заголовок четвертого уровня**

Десктопы

H1, 44/60 pt **Заголовок первого уровня**

H2, 30/36 pt **Заголовок второго уровня**

H3, 22/28 pt **Заголовок третьего уровня**

H4, 18/24 pt **Заголовок четвертого уровня**

Мобильные устройства

H1, 29/36 pt **Заголовок первого уровня**

H2, 22/28 pt **Заголовок второго уровня**

H3, 19/24 pt **Заголовок третьего уровня**

H4, 16/20 pt **Заголовок четвертого уровня**

ОСНОВНОЙ ТЕКСТ

Основной размер шрифта для печати — 11 пунктов, на десктопе — 18 пунктов, на смартфоне — 16. Текст такого размера без усилий считывается даже людьми, у которых проблемы со зрением.

Для навигации используется 16 размер текста. Он хорошо читаем в коротких текстах и не отвлекает от блока с основной информацией.

Для необязательных к прочтению текстов допустимо использовать шрифт размером не менее 8 пунктов для печатных материалов и 14 пунктов для веб-сайтов.

Блоки или абзацы основного текста должны разделяться между собой отступом не менее 4 pt для печатной продукции и 16 px для веб-сайтов.

Для текстового блока всегда используются отступы по 3pt сверху или снизу. При вёрстке печатных материалов рекомендуется установить отступы перед или после абзаца для всего текста

3 pt

Для текстового блока всегда используются отступы по 8px сверху и снизу. Дизайнеру необходимо учитывать его наличие самостоятельно.

16 px

ДЛИНА СТРОКИ

Длина строки для комфортного чтения с экрана должна равняться 40-80 знакам текста, включая пробелы. Лейаут дизайн-системы построен таким образом, что при ширине в 4 колонки строка основного текста укладывается в 70-80 символов.

Для печатной продукции допускается использование строки длиной до 95 знаков, включая пробелы. Внешниеи внутренние поля размечаются таким образом, чтобы строка основного текста укладывалась в 95 символов.

Слишком длинные строки усложняют считывание текста: дочитав до конца строки, сложно быстро найти взглядом начало следующей.

Короткие строки вынуждают перескакивать на следующую строку слишком часто. Единственный случай, когда короткие строки приемлемы — это малое количество текста.

20	40	60	80	100

оптимальный диапазон для сайтов

оптимальный диапазон для печати

Слишком короткая
строка усложняет
чтение текстов

Единственная ситуация, в которой
уместны короткие сроки — малое
количество текста

Для наилучшей читабельности длина строки должна быть
между 40 и 80 символами, включая пробелы

Длинные строки разрушают ритм, так как читателю трудно найти следующую строку
текста взглядом, и чтение становится затруднительным

Слишком длинные строки полностью разрушают ритм текста, каждый раз приходится делать
длинную паузу, чтобы пробежаться по строке обратно и найти следующую

ВЫСОТА СТРОКИ

Высота строки численно равна интерлиньяжу, то есть расстоянию между базовыми линиями шрифта.

От высоты строки зависит удобство чтения текста. Если строки располагаются слишком близко, то читателю будет сложно найти начало следующей строки. Если расстояние слишком большое, то текстовый блок будет разваливаться.

Оптимальное значение высоты строки — 1,5 размера шрифта, которым набран текст. То есть, для шрифта 14pt это 14 * 1,5 = 21pt. Для заголовков действует соотношение 1,25.

10/9
Слишком мало

От высоты строки зависит удобство чтения текста. Если строки располагаются слишком близко, то читателю будет сложно найти начало следующей строки. Если расстояние слишком большое, то текстовый блок будет разваливаться.

10/12
Правильно

От высоты строки зависит удобство чтения текста. Если строки располагаются слишком близко, то читателю будет сложно найти начало следующей строки. Если расстояние слишком большое, то текстовый блок будет разваливаться.

10/13
Правильно

От высоты строки зависит удобство чтения текста. Если строки располагаются слишком близко, то читателю будет сложно найти начало следующей строки. Если расстояние слишком большое, то текстовый блок будет разваливаться.

10/14
Правильно

От высоты строки зависит удобство чтения текста. Если строки располагаются слишком близко, то читателю будет сложно найти начало следующей строки. Если расстояние слишком большое, то текстовый блок будет разваливаться.

МАКЕТИРОВАНИЕ

Макеты страниц строятся на основе сетки и системы отступов. Это универсальные инструменты организации пространства, которые решают сразу несколько задач.

Зачем нужны правила построения

Дизайнеру

Сетка является основой макета, по которой выстраиваются все элементы. Расстояния между ними задает система отступов. Это гарантирует применение аналогичных приемов в аналогичных ситуациях, что упрощает и ускоряет принятие решений, а значит и работу дизайнера.

Также система задает единые правила, по которым макеты растягиваются до разных ширин экрана, а компоненты адаптируются под разные устройства. Таким образом, благодаря сетке, правильно построенный макет адаптируется под все разрешения и устройства по простым формальным правилам.

Программисту

Система построения макета ускоряет разработку. Единожды заданные правила применяются на всех страницах, а не прописываются вручную для каждого элемента.

Пользователю

Помимо целостности и аккуратности вида страницы, единые правила гарантируют идентичные паттерны подачи информации на всем сервисе, что облегчает ее восприятие.

Десктопы

Экран 1088

Контент 1024

| | 144 | | 144 | | 144 | | 144 | | 144 | | 144 | |

32   32   32   32   32   32   32

Смартфоны

Экран 360

Контент 312

| | 144 | | 144 | |

24   24   24

ДИАГРАММЫ

При построении диаграмм не используйте несочетающиеся цвета.
Если у вас возникают затруднения с выбором цветов, обратитесь к последовательностям из раздела Фирменные цвета.

Избегайте использования легенды, старайтесь переносить данные непосредственно в область диаграммы.
Для описаний используйте кегль на 1-2pt меньше, чем у основного шрифта публикации. Рекомендуется использовать начертания Light и Condensed. Рекомендуемый размер 9-10pt.

Гистограммы и линейчатые диаграммы

Не используйте вертикальную ось и линии сетки. Используйте метки данных непосредственно на столбцах или строках, зритель по ним самостоятельно считывает размер столбца, и вертикальная ось не нужна. Таким образом мы облегчаем диаграмму и повышаем её читаемость. Но обязательно добавляйте метки данных, чтобы зритель быстро видел размер столбца. Если в диаграмме есть главный столбец, то его можно выделить ярко, как в диаграмме справа.

Убедитесь, что вся нужная зрителю информация есть рядом со столбцами: это временные точки и метки данных.

Не используйте разные цвета на строках (столбцах), без необходимости выделить главные показатели.
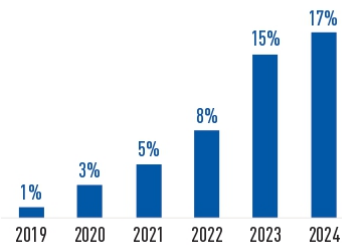
Динамика развития рынка
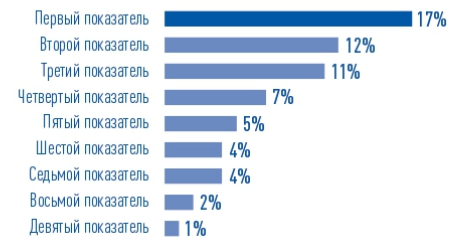
Размеры долей рынка

Круговые диаграммы

Если в диаграмме есть главный сектор, на нем необходимо сделать акцент с помощью цвета: этот сектор должен быть самым контрастным. Остальные сектора можно окрасить в более тусклые оттенки того же цвета.
Главный сектор, должен начинаться там же, где число «12» на циферблате (представьте, что круговая диаграмма — это циферблат часов). Главный сектор диаграммы можно выдвинуть из центра, чтобы он был более различим. Но выдвигать все сектора диаграммы из центра — это ошибка.

Не используйте классический вид круговой диаграммы, в виде пирога. Вместо этого придайте её вид кольца с сегментами. В центре кольца можно использовать иконку, свзанную по смыслу с тематикой диаграммы. Но не делайте иконку слишком большой, она не должна заполнять всё свободное пространство.

17%
первый показатель

12%
второй показатель

11%
третий показатель

10%
четвертый показатель

5%
пятый показатель

48%
остальные показатели

17%
первый показатель

12%
второй показатель

11%
третий показатель

10%
четвертый показатель

5%
пятый показатель

48%
остальные показатели
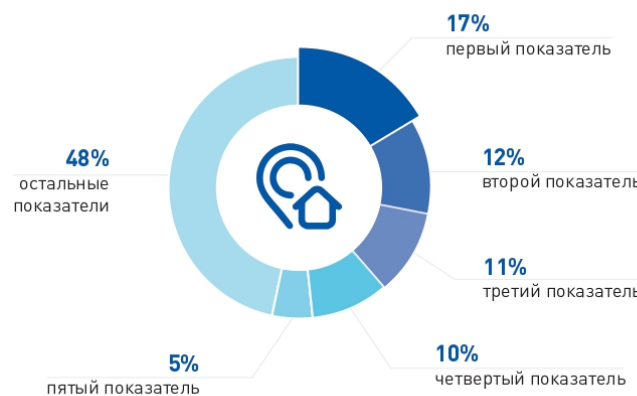
Графики

Не используйте вертикальную ось и линии сетки. Используйте метки данных непосредственно на линиях графика. Но оставьте линии проекции. Это вертикальные прямые, которые идут от точек данных к горизонтальной оси. Они помогают зрителю определить, с какой временной точкой связано значение.

Не используйте легенду.

Не использовать сразу несколько маркеров (круги, квадраты, треугольники и т.д.) на одной диаграмме. В нпримере ниже маркеры круглые, но благодаря цветам зритель не путает графики друг с другом. Метки данных также рекомендуется окрашивать в цвета графиков. Иногда метки данных нужно перемещать вручную, чтобы они не перекрывали друг друга и не заходили на линии.
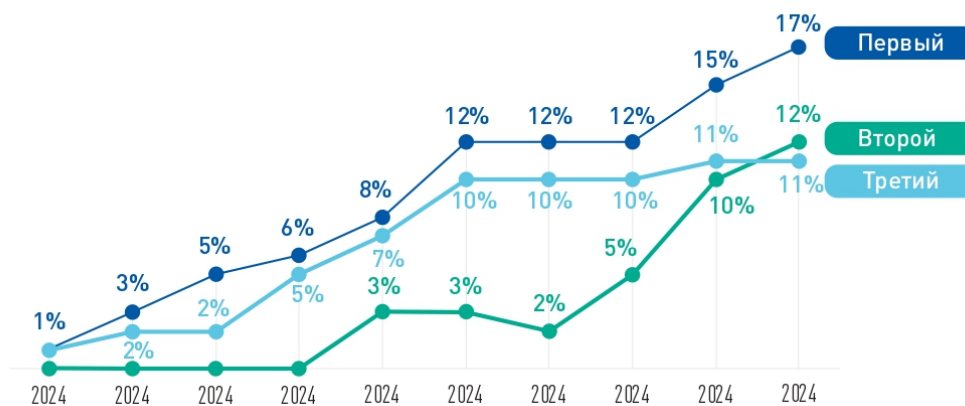
Как изменялись показатели

ВИЗУАЛЬНЫЕ МАТЕРИАЛЫ
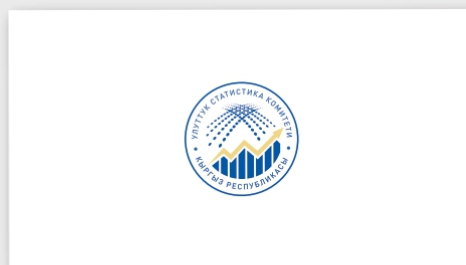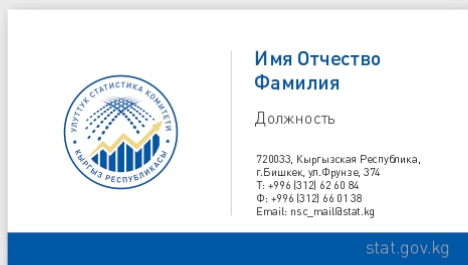
ВИЗИТНЫЕ КАРТОЧКИ

Визитные карточки изготавливаются размером 90х50 мм) на гладкой, белой бумаге плотностью 280-350 гр/м^2

Печать цветная, лазерным или офсетным способом.

Визитка должна быть одноязычной. Для других языков используйте отдельные языковые версии визиток.

Все контактные данные располагаются на лицевой стороне. Обратная сторона содержит только логотип на белом или фирменном синем фоне.

Визитная карточка может быть исполнена в любой ориентации, как горизонтальная, так и вертикальная.

Информационный блок всегда должен быть выключен влево, так мы получаем баловую линию и упрощаем восприятие информации.

БУКЛЕТЫ

ПРЕЗЕНТАЦИИ

Sitemap structure

Note: during the website development it is necessary to agree the sitemap structure with the CustomerClient, as there will be changes in the structure of sections/subsections.

In English	In Kyrgyz	In Russian
• Homepage	• Баштапкы	• Стартовая
• Statistics	• Статистика	• Статистика
○ Agriculture	○ Айлана-чөйрө	○ Внешняя торговля
○ Construction	○ Айыл чарба	○ Жилищный фонд
○ Criminal	○ Баалар жана тарифтер	○ Занятость
○ Distributive trades and services	○ Билим берүү жана маданият	○ Заработная плата
○ Education and culture	○ Жумуштуулук	○ Здравоохранение
○ Employment	○ Инвестициялар	○ Инвестиции
○ Environment	○ Калк	○ Информационно-коммуникационные технологии
○ External trade	○ Калктын жашоо денгээли	○ Малое и среднее предпринимательство
○ Finance	○ Курулуш	○ Население
○ Healthcare	○ Кылмыштуулук	○ Национальные счета
○ Housing found	○ Маалыматтык-коммуникациялык технологиялар	○ Образование и культура
○ ICT	○ Саламаттыкты сактоо	○ Окружающая среда
○ Investments	○ Соода жана калкка кызмат көрсөтүү	○ Преступность
○ Living standard	○ Статистикалык каттоолор	○ Промышленность
○ Manufacturing	○ Транспорт жана байланыш	○ Сельское хозяйство
○ National accounts	○ Турак жай фонду	○ Статистические переписи
○ Population		○ Строительство
○ Prices and tariffs		○ Торговля и услуги населению
○ Small and medium enterprises		○ Транспорт и связь
○ Statistical censuses		○ Туризм
○ Tourism		○ Уровень жизни населения
		○ Финансы
		○ Цены и тарифы
		• Статкадендарь

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50

- Public discussion
- National Sustainable Development Strategy
- Council on statistics
- Administrative regulation
- Socio-economic situation of regions
- Publication of regional bodies of state statistics
- Statistics about children
    - Demographic characteristics
    - Education
    - Employment and unemployment among minors
    - Juvenile delinquency
    - Morbidity in children
- Analytical notes
- Open Data Portal of the Kyrgyz Republic
- Monee info
- Millenium development goals
- Ads of the World Bank
- Standard of services
- Tender

- Сүрөт галереясы
- Семинарлар жана квалификацияны көтөрүү
- Калктын ишеним индекси
- Коорупция жөнүндө билдирүү
- Коомдук талкуу
- Туруктуу өнүктүрүүнүн улуттук стратегиясы
- Статистика боюнча кеңеш
- Административный регламент
- Статистика Ошской области
- Региондордун социалдык экономикалык абалы
- Балдар жөнүндө статистика
    - Балдардын оорусу
    - Билим берүү
    - Демографиялык мүнөздөмөлөр
    - Жаш өспүрүмдөр арасындагы кылмыштуулук
    - Жашы жетпегендердин арасында жумушка орношуу

[Invitation for Bids](#) [мониторинг цен](#) [Request for expressions of interest](#) [Invitation for Bids](#) [Projects and research](#) [World Bank Project](#) [Reports](#) [Video materials](#) [Search](#)	жана жумушсуздук [Аналитикалык материал](#) [Кыргыз Республикасынын ачык маалыматтар порталы](#) [Monee info](#) [Миң жылдыкты өнүктүрүү максаттары](#) [Бүткүл Дүйнөлү Банктын жарыялары](#) [Кызмат көрсөтүүлөрдүн стандарты](#) [Тендер](#) [Приглашение к торгам](#) [Вакансии](#) [Проекты и исследования](#) [Дүйнөлүк банктын долбоору](#) [Отчёттор](#) [Видео материалдар](#) [Сайтта издөө](#)	

Code lists (Example)

NOTE: during the website development, changes and clarifications may be made to this example

1. CL_Type of release (event or type of publication)

IDType	Type of release_EN
0	Events
1	Press Release
2	Statistical Yearbook
3	Bulletin
4	Spreadsheet
5	Dynamic table/ Timeseries
6	Monthly newsletter
7	Special edition
8	Special issue
9	Methodologies and standards
10	Trends
11	Studies and analyses
12	Old and rare books
13	Census books
14	Agricultural census books
15	Regional statistics
16	Municipality statistics
17	Infographics
18	Editions for promotional purposes
19	Working document
20	Questionnaries
21	Internal documentation

2. CL_Satistical Area

IDStatArea	StatArea_EN
01	Environment
02	Agriculture
03	Prices and tariffs

04	Education and culture
05	Employment
06	Investments
07	Population
08	Living standard
09	Construction
10	Criminal
11	ICT
12	Healthcare
13	Distributive trades and services
14	Statistical censuses
15	Transport and communications
16	Housing found
17	Tourism
18	External trade
19	National accounts
20	Finance
21	Small and medium enterprises
22	Wages
23	Manufacturing

3. CL_Satistical Subarea (Example: Environment)

IDStatArea	IDStatSubarea	Statistical subarea_EN
01	0101	Number of animals
01	0102	Presence of residuals
01	0103	Reforestation
01	0104	Protection
01	0105	Waste
01	0106	Forest reserve
01	0107	Expenditures and investments
01	010701	Expenditures
01	010702	Investments

4. CL_Indicators (Example: Environment)

IDStatSubarea	IDIndicator	Indicator	Link to reference metadata*	Link to XLS file (in the future to Dissemination DB)	Statistical area Environment - List of Dynamic tables (current NSC website)
0101	0101IND22	The number of furred animals		https://stat.gov.kg/en/statistics/download/dynamic/769/	5.07.00.22 The number of furred animals

0101	0101IND21	The number of feathered animals		https://stat.gov.kg/en/statistics/download/dynamic/768/	5.07.00.21 The number of feathered animals
0101	0101IND20	The number of ungulate animals		https://stat.gov.kg/en/statistics/download/dynamic/767/	5.07.00.20 The number of ungulate animals
0102	0102IND19	Presence of residuals of forth class		https://stat.gov.kg/en/statistics/download/dynamic/766/	5.07.00.19 Presence of residuals of forth class
0102	0102IND18	Presence of residuals of third class		https://stat.gov.kg/en/statistics/download/dynamic/765/	5.07.00.18 Presence of residuals of third class
0102	0102IND17	Presence of residuals of first class		https://stat.gov.kg/en/statistics/download/dynamic/764/	5.07.00.17 Presence of residuals of first class
0102	0102IND16	Presence of residuals of second class		https://stat.gov.kg/en/statistics/download/dynamic/763/	5.07.00.16 Presence of residuals of second class
010701	010701IND15	Expenditures of enterprises and organizations for environmental protection		https://stat.gov.kg/en/statistics/download/dynamic/762/	5.07.00.15 Expenditures of enterprises and organizations for environmental protection
010701	010701IND14	The state budget expenditures on environmental protection		https://stat.gov.kg/en/statistics/download/dynamic/761/	5.07.00.14 The state budget expenditures on environmental protection
0103	0103IND11	Reforestation		https://stat.gov.kg/en/statistics/download/dynamic/757/	5.07.00.11 Reforestation
010702	010702IND10	Fixed capital investments for environment and nature protection, rational use of nature resources		https://stat.gov.kg/en/statistics/download/dynamic/606/	5.07.00.10 Fixed capital investments for environment and nature protection, rational use of nature resources
0104	0104IND09	Air pollution protection		https://stat.gov.kg/en/statistics/download/dynamic/599/	5.07.00.09 Air pollution protection
0104	0104IND06	Protection and rational use of water resources		https://stat.gov.kg/en/statistics/download/dynamic/598/	5.07.00.06 Protection and rational use of water resources
0104	0104IND05	Protection and rational use of forestry resources		https://stat.gov.kg/en/statistics/download/dynamic/677/	5.07.00.05 Protection and rational use of forestry resources
0105	0105IND04	Volume of toxic production waste		https://stat.gov.kg/en/statistics/download/dynamic/597/	5.07.00.04 Volume of toxic production waste
0106	0106IND03	Number of forest reserve areas		https://stat.gov.kg/en/statistics/download/dynamic/596/	5.07.00.03 Number of forest reserve areas
0106	0106IND02	Total area of forest reserve areas		https://stat.gov.kg/en/statistics/download/dynamic/676/	5.07.00.02 Total area of forest reserve areas
010702	010702IND01	Share of investment in fixed assets for environmental protection		https://stat.gov.kg/en/statistics/download/dynamic/835/	5.07.00.01 Share of investment in fixed assets for environmental protection

* In this project link should be to XLS/PDF/HTML/CSV file. In the future this link should lead to reference metadata management system based on SQL database.

5. CL_Periodicity

IDPeriodicity	Periodicity_EN
A	Annual
A10	Every ten years
A2	Every two years
A3	Every three years
A4	Every four years
A5	Every five years
S	Semiannual
Q	Quarterly
M	Monthly
D15	Twice a month
PV	Intermittent
NA	Not applicable

6. CL_reference period

IDRefPeriod	Code	Reference period_EN
1	M01	january
2	M02	february
3	M03	march
4	M04	april
5	M05	may
6	M06	june
7	M07	july
8	M08	august
9	M09	september
10	M10	october
11	M11	november
12	M12	december
13	Q01	I quarter
14	Q02	II quarter
15	Q03	III quarter
16	Q04	IV quarter
17	S01	1st half
18	S02	2nd half
19	P02	january-february
20	P03	january-march
21	P04	january-april

22	P05	january-may
23	P06	january-june
24	P07	january-july
25	P08	january-august
26	P09	january-september
27	P10	january-october
28	P11	january-november
29	P12	january-december
30	NA	not applicable

7. CL_Data type

IDDataType	Data type
1	final data
2	preliminary results
3	estimation
4	flash estimate
5	projection

8. NSC reference metadata structure (Example - Final structure to be agreed with NSC)

1. Indicator information	
2. Data reporter	
Organization	National Statistical Committee of the Kyrgyz Republic (Demographic Statistics Division)
Contact person(s)/Focal point	Maatkulova J.B.
Contact person's email	Jmaatkulova@stat.kg
Contact person's phone	+996 (0312) 32 46 36
Organization website (if available)	www.stat.kg

3. Definitions and concepts	
Definitions	WHO defines maternal mortality as death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management (from direct or indirect obstetric death), but not from accidental or incidental causes.
Concepts	Mortality is the process of generation extinction, one of the two main sub-processes of population reproduction. Among causes are diseases, pathological conditions or injuries that lead to or contribute to death, as well as accidents or acts of violence that cause fatal injuries. Cause of death has been coded since 2000. Based on the World Health Organization 10 Revision of International Statistical Classification of Diseases, Injuries, and Causes of Death (ICD-10).

Rationale and interpretation	The indicator analysis allows assessing State policy effectiveness of in the area of maternal and child protection in the country, since the level of medical care for pregnant women and mothers determines health of future generations. Maternal mortality rates in Kyrgyzstan, although decreasing slightly over the years, remain high. The death of a woman while pregnant or within 42 days of termination of pregnancy is considered to be a maternal death. Thus, if the deceased was pregnant (irrespective of the duration and site of the pregnancy) or died within 42 days after giving birth, the medical death certificate must include an indication of the pregnancy period or post-natal period, even if pregnancy was not related to the main cause of death.
4. Data sources and collection methods	
Data sources	Cause of death information is obtained from medical death certificates drawn up by medics or paramedics on disease, accident, homicide, suicide and other external influences resulting in death. These documents, along with civil registration of deaths drawn up by civil registry offices (which are subordinate to the State Registration Service), are sent to statistical agencies for calculation. Of causes listed, one is selected for statistical purposes - the primary, i.e. the disease or injury that caused events directly leading to death.
Data collection methods	Data are obtained from Death Certificates and attached to them Medical Death Certificates submitted by the Civil Registry Office (SRS under the GKR) on a regular basis (monthly). Primary processing and data consolidation are carried out at the level of local government statistical agencies. The national data set is processed by the National Statistical Committee. The period between data collection and submission is 38 days.
5. Method of computation and	

other methodological considerations	
Method of computation	Maternal mortality ratio (MMR): Number of maternal deaths during a given time period per 100,000 live births during the same time period. The maternal mortality ratio can be calculated by dividing recorded (or estimated) maternal deaths by total recorded (or estimated) live births in the same period and multiplying by 100 000. Measurement requires information on pregnancy status, timing of death (during pregnancy, childbirth, or within 42 days of termination of pregnancy), and cause of death.
Comments and limitations	This indicator reflects maternal mortality risks in relation to the number of children born alive and essentially records the risk of death from pregnancy or live birth. According to experts, coverage of civil registration system is considered satisfactory though needs to be improved due to being paper-based. Since December 2014 an automated electronic system AIS "Registration Office" has been in operation as a component of SRS information systems. However, upon receipt by statistical authorities paper-based data then entered into special software by statistical agencies employees, which sometimes leads to errors and omissions. Soon (until the end of 2020th) a database on natural and migratory population movements being derived from the SRS data will become one of population statistics sources.
Quality assurance	Logical and arithmetic control of recorded data is carried out. Data control in data records is carried out by logical control procedure embedded in the data input and processing software. The causes of death codes are checked along diagnoses recorded in death report, according to ICD-10, and results tables are analyzed for causes of death.

6. Data availability and disaggregation	
Data availability and gaps	Data are distributed via the National Statistical Committee publications: «Social economic situation of the Kyrgyz Republic» monthly report, statistical collections: «Demographic yearbook of the Kyrgyz Republic», «Social trends of the Kyrgyz Republic», «Women and men of the Kyrgyz Republic», «Health of population and healthcare in the Kyrgyz Republic», «Young people in KR» available on the official website of NSC KR: http://www.stat.kg/ru/publications/ Time series have been available since 1990.
Disaggregation	Indicator is calculated nationally and by regions (Republic, regions, city of Bishkek, city of Osh).
7. Comparability with international data/standards	International definition of the indicator is used for national statistics. Data coding and compilation on deaths by cause of death is done by state statistics authorities in accordance with the WHO International Statistical Classification of Diseases and Causes of Death (ICD-10), since 2000 report. By agreement with the National Statistical Committee, database on mortality is submitted to the Centre for Electronic Health of the Ministry of Health of the Kyrgyz Republic: Form 2 «Information on the number of births, marriages, divorces and deaths by cause of death» is submitted monthly, with a delay of 1.5 months from the reporting month and form C52 «Population mortality by cause of death» submitted annually, in June following the reporting year.
8. References and documentation	References to RLA and methodology: http://www.stat.kg/ru/about/pravovye-osnovy-organov-gosudarstvennoj-statistiki/; https://unstats.un.org/sdgs/Metadata; http://www.stat.kg/ru/statistics/download/methodology/68/. National Statistical Committee publications: «Social economic situation of the Kyrgyz Republic» monthly report, statistical collections: «Demographic yearbook of the Kyrgyz Republic», «Social trends of the Kyrgyz Republic», «Women and men of the Kyrgyz Republic», «Health of population and healthcare in the Kyrgyz Republic», «Young people in KR» available on the official website of NSC KR: http://www.stat.kg/ru/publications/ KR National SDG Reporting Platform: https://sustainabledevelopment-kyrgyzstan.github.io

List of terms (glossary)

The following terms are used in this Statement of Work:

Administrative part of the site	A part of the site closed from visitors, intended for site management. It is managed by the administrator (technical support) and the site editor (information support).
System administrator	A specialist who provides technical support. Has full access to information content, structure, system settings of the site
Banner	is a visual component of a website. It is designed to highlight important information or key events. Usually placed within the structure of a website, it contains a brief but informative message. This could be an announcement, news or a temporary offer. In addition, an informational banner is often interactive and clickable, directing visitors to a specific page for more information or action.
Web site (site)	A set of interconnected static and dynamic pages containing text data, pictures, video and other digital information, united under one address (domain name or IP-address) on the Internet.
Web interface	A set of screens and system controls that allow a user accessing the system via a web browser to maintain and manage the system.
Web browser	A client program supplied by third parties that allows you to view the content of web pages.
World Wide Area Network (WWW, web, web)	A distributed system that provides access to linked documents located on different computers connected to the Internet. The prefix "web" can be used to refer to objects oriented for use on the WWW or utilizing technologies typical of the WWW (e.g., web interface - web-based interface).
Hyperlink (reference, link)	An active piece of text or image that allows you to load another page or perform a specific action.
Domain name	A symbolic name of the hierarchical space of the Internet. The full name of a domain consists of the names of all domains to which it belongs, separated by dots.
Web site design	The structure, graphic design and presentation of information are unique to a particular website.
Page design template	A file containing the elements of the external design of the site pages, as well as a set of special tags used by the site publishing system to display information when creating the final pages.
Dynamic page	A website page that processes and outputs information from a database using program code.
Dynamic table	is a special type of table where you can easily modify data, add new rows or columns, and perform calculations in real time. It helps analysts and researchers analyze data and find patterns and relationships between variables.
Indicator	is a variable or indicator that is used to measure or characterize a particular phenomenon or situation. It is a specific aspect of data that

	helps us to measure or track certain characteristics or trends. For example, in economics, an unemployment indicator is used to measure the percentage of unemployed people in a particular country or region. Indicators can be numerical (e.g. percentage, average), categorical (e.g. type of employment) or even visual (e.g. graph or chart).
Value	is a specific number or result that results from measuring or observing a particular variable or characteristic. A value is specific information about that variable at a particular point in time or in a particular situation. For example, if we measure people's height and get a value of 170 centimeters, it means that this person is 170 centimeters tall. Values in statistics are used to analyze data, calculate statistical measures (such as mean or variance) and compare different observations or groups.
Categories	is a group or classification that is used to organize data according to a particular attribute or characteristic.
Content	Text, graphic, file materials (content of the system frontend)
Confidential information	Information the dissemination of which may violate the rights and interests of its owner or other persons, and measures must be taken to ensure non-disclosure and protection from unauthorized access.
Metadata	is data about data, information about information, related to additional information about content. Metadata of statistical indicators is the structured information that describes, explains the methodology of production the indicator.
Methodology	is the systematic approach and set of rules that determine how statistical research is conducted. It includes the choice of data collection methods, the determination of sample size, the application of statistical methods to analyze the data and the interpretation of results. Methodology in statistics helps to ensure the accuracy, reliability and comparability of research results.
System update	Adding/editing/deleting information and graphic materials on the site after its delivery to the Client, in the process of system operation.
Public part of the site (Frontend)	The main informational part of the site, open to visitors
Public information	Information that is not subject to protection requirements
Sections	is a field or subfield that studies specific aspects of data or methods of analysis. There are different sections in statistics, each focusing on specific types of data or problems.
Editor, content manager of the site	Specialist providing information support of the site (content update)
Backup copy	A collection of database objects, represented as files, that allows an exact copy of the original database structure to be restored to a similar database management system.
Static page	A website page that does not access the database: all information is stored in the page code.
Website content management system	An information system that allows authorized users to make changes to the hierarchical structure and information content of the website without the use of any additional special software.

Technical support	Monitoring of constant and proper operation of the system
Hosting	A service to provide disk space to physically place information on a server that is permanently located on the Internet
IP address	The address of a node in an IP-based network