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**Terms of Reference**

**For "Improvement of IT service management system and automation of basic processes"**

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1. Introduction

Within the framework of the tender for the selection of the Executor for the project "Improvement of IT service management system and automation of basic processes", the Customer has developed the present Terms of Reference, which is an integral part of the tender documentation and defines the requirements, including the process of project implementation.

In terms of **project organization and execution** the Terms of Reference describes the following requirements:

* requirements for the composition of services;
* requirements for project phasing;
* requirements to the methodology of service provision.

In terms of **result delivery**, the Terms of Reference describes the following requirements:

* requirements to the developed process regulations, to the process documentation;
* requirements to the functional capabilities of the Process Automation System;
* requirements to the developed technical documentation.

Project realization should be carried out taking into account the best world practices and recommendations of ITIL library, using modern software, as well as "best practices" developed by the Contractor in the course of realization of projects of similar class.

1. Terms, abbreviations and acronyms

1 List of technical terms and abbreviations used

| **Term, abbreviation** | **Description** |
| --- | --- |
| System | IT service management system with automatized basic processes |
| Project | "Development of IT service management system and automation of basic processes" |
| Expert | Employee of the Customer's IT department involved in support and/or provision of IT services, who has access to the System functions and data stored in the System |
| Directory Service,  Active Directory  AD, | Microsoft Active Directory, Microsoft Active Directory, an LDAP-compliant implementation of Microsoft's directory service for the Windows NT family of operating systems. |
| LDAP | Lightweight Directory Access Protocol, Directory Service Access Protocol |
| Database | A set of structured information accumulated in previous periods of time based on the experience of technical specialists and containing standard actions for solving a typical problem |
| Supportive group | A group of specialists formed according to the functional principle of supporting a specific area of the IT infrastructure used to provide an IT service |
| Life cycle | A set of stages of processing a request or order, characterizing the degree of its execution and the area of responsibility |
| Interface | A set of graphical elements (text blocks, buttons, links, etc.) presented on the computer screen when working with the System |
| Incident | Unplanned interruption of an IT service or degradation of the quality of an IT service |
| Service Catalog | A database and/or structured document containing information about all IT services in production operation |
| Configuration Unit | Any component that needs to be managed in order to provide an IT service |
| Service Request | A request for support, information, advice or documentation that is not an IT infrastructure failure |
| Task | A planned action to be performed in the course of servicing a request |
| Contact, Request | Any contact between a user representative and the support team. A request can be registered on the fact of contact |
| User | A legal entity or individual using the service on the basis of a contract (agreement) or internal regulations |
| Support | Activities aimed at eliminating failures during the use of services, preventing failures or minimizing the negative consequences of failures for the Customer's users |
| Access rights | Authorization of a user to perform certain operations in the system (creation, reading, modification and deletion of information |
| User role | A characteristic that defines what actions and with what objects can be performed by a user acting in a given role. |
| Service Request Management | The process responsible for managing the lifecycle of all service requests |
| Knowledge Management | The process responsible for providing a common repository of viewpoints, ideas, experiences, information and making them available when needed. Knowledge Management facilitates informed decision making and increases efficiency by reducing the need for repeated knowledge retrieval |
| Incident Management | The process responsible for managing the lifecycle of all incidents. Incident management ensures that the business impact is minimized and the service is restored to normal operation in the fastest possible way |
| Service Catalog Management | The process responsible for defining and maintaining the service catalog and ensuring that the catalog is available to all authorized parties |
| Service Level Management | The process responsible for negotiating Service Level Agreements and ensuring that they are met |
| Configuration Management | The process responsible for managing the information about Configuration Units required to provide an IT service, including their Relationships. |
| Change Management | The process responsible for managing the Life Cycle of all Changes. The priority of Change Management is to facilitate the implementation of beneficial Changes with minimum disruption to the IT service provided. |
| Service | An IT service that fulfills one or more of the user's needs, supports the user's business objectives, and is perceived by the user as a coherent whole |
| ITIL | Information Technology Infrastructure Library - A library of best practices for information technology management |
| ITSM | Information Technology Service Management - a service approach to information technology delivery |
| Kerberos | Network Authentication Protocol |
| NTLM | NT LAN Manager - Network Authentication Protocol |
| OLA | Operation Level Agreement - an agreement between an IT service provider and another part of the same organization |
| SLA | Service Level Agreement - Service Level Agreement |
| CobiT | Control Objectives for Information and Related Technology - a set of open documents, about 40 international and national standards and guidelines in the field of IT governance, auditing and IT security |

1. General information
   1. General characteristic of the Customer's activities and organizational structure

The main types of the Customer's activity - rendering services on \_\_\_\_\_\_\_\_\_\_.

The finalized IT service management system and automation of basic processes will be widely used by all Customer's subdivisions when working with the corporate information and computer network.

* 1. Preliminary Problem Statement

To ensure a guaranteed level of IT services provision and support it is required to build a single consolidated IT services management system with automation of basic processes, including the finalized ones.

* + 1. Project scope

The project will develop and automate basic ITIL processes.

Development and automation of basic processes (see clause 5.1):

* + Service request management;
  + Incident management;
  + Service catalog management;
  + Service level management (implementation with binding to primary fields of the configuration units directory);
  + Change Management;
  + Configuration management;
  + Service showcase management.

The following steps are expected for the project implementation:

* Conducting an audit of the current state of IT governance processes;
* Development of IT management regulations and processes based on ITIL/ITSM recommendations and CobiT metrics;
* Setting up a software system that automates the developed IT management regulations and processes.
  + 1. Project Timeframe and Cost Limit

Completion period - within 5 months from the date of signing the contract.

Marginal cost of the lot -\_\_\_\_\_\_\_ rubles including VAT

1. Project goals and objectives
   1. Project Objectives

The following capabilities and objectives shall be achieved as a result of the refinements::

1. automated classification and routing of calls and incidents, including between support lines, and their regulation;
2. reduction of response time to requests and incidents to the minimum;
3. reducing the time of searching for typical and workaround solutions, requests and incidents to 3 minutes;
4. providing access of specialists of all support lines to up-to-date information in the knowledge base, convenient and fast search of known and workaround solutions of incidents, including contextual, as well as providing users with access to relevant solutions of typical incidents;
5. providing end users with access to a convenient graphical interface of the System (services showcase) for independent creation of requests to the Support Service and tracking the status of requests at all stages of their life cycle, their regulation, as well as communication with the Support Service during the processing of requests;
6. mechanisms in place for delineating areas of responsibility and authority of specialists, their regulation, groups and support lines (outsourcing/insourcing), as well as for dispatching work based on the qualifications and employment of specific employees;
7. mechanisms in place to monitor and verify the fulfillment of dynamically changed Service Level Agreement (SLA).
   1. Project Objectives

In order to achieve the stated objectives, the following tasks need to be accomplished::

* development and formalization of processes and procedures for providing and supporting IT services;
* automation of the developed processes;
* customization of the System and filling it with data;
* integration with related systems.
  + 1. Tasks on development and formalization of processes and procedures
* Taking into account existing groups, form a list of IT services provided to business unit;
* Fix service level agreements for the services provided;
* Modernize the existing single point for receiving all types of requests from users and specialists of single customer services for the provided services;
* Form/modernize a tiered support structure;
* Systematize the work of IT department employees in supporting IT services (formalize processes):
  + unify typical processes (identify typical requests and fix the route of their passage);
  + develop a classification of work performed;
  + fix normative labor costs and timeframes when performing works;
  + fix the distribution of duties/responsibilities in the implementation of support;
  + fix the order of interaction between specialists when supporting IT services;
  + organize management of staff workload;
  + ensure timely engagement of specialists with higher qualifications or higher authorities (escalation).
* Develop an interaction scheme taking into account the distribution and hierarchy of the Customer's enterprises and branches::
  + ensure that problems can be escalated from branches to central units or external service organizations;
  + ensure that time zones and geographical locations of enterprises and branches are taken into account when managing the tasks of specialists;
  + form unified regulations and a unified Knowledge Base for all branches of the Company..
    1. Tasks to automate the developed processes

To set up the System supporting organizational measures and developed regulations, including development of mechanisms for:

* + control over fulfillment of user requests;
  + control of fulfillment of obligations on provision and support of services by the employees of the single customer service;
  + providing users with up-to-date information, timely informing users about implemented changes and other works;
  + control over the actual fulfillment of the SLA;
  + control of SLA fulfillment, time of requests fulfillment, including point requests;
  + control over the quality of fulfillment of work on requests (including receiving feedback from business users;
  + receiving up-to-date information on the workload of specialists;
  + distribution and redistribution of tasks between specialists and subdivisions;
  + recording historical data on the undertaken activities;
  + accumulating, systematizing and providing specialists with standard solutions and algorithms for emerging requests (working with the Knowledge Base);
  + accumulation and analysis of information to find "bottlenecks" and root problems;
  + control over fulfillment of obligations of external contractors;
  + timely notification of service providers about the need to perform work on request.
* Set up integration of the System, including alerts:
  + with the corporate mail service;
  + with Active Directory catalog service;
  + with telephony on Genesis/Cisco platform for 1st line operation..
    - 1. Benefits from process automation

The following benefits shall be obtained by automating the developed IT processes:

* improvement of the quality of IT services provision and support to business users due to automated execution of interaction regulations;
* guaranteeing the level of IT service provision and the level of IT service support to business users through automated monitoring of the level of service provision and automated mechanisms of hierarchical escalations and alerts;
* through automated processing of statistical, historical data and reporting:
  + providing transparent control over the interaction between business units and IT departments in the context of IT service delivery;
  + obtaining IT department management tools..

1. Project Requirements

The following activities shall be carried out within the project::

* necessary activities according to clause 5.3. have been performed;
* training of key users' specialists has been carried out;
* necessary project documents, regulations, as well as documentation for end users of the System, including administrators of the System, have been developed;
* The System was put into commercial operation and transferred for suppor.
  1. Requirements to the project results

The Contractor shall utilize:

* competitive licenses for engineers - 50 pcs.

The software used by the Contractor shall be:

* fully localized in Russian language;
* supported by the manufacturer and specialists in Russian, including, if necessary, in 24x7 mode;
* supported by the manufacturer's service center on the territory of the Russian Federation, including the preparation of patches and updates.

The Customer provides the Contractor with additional system software:

* provision of an operating system in accordance with clause 5.4.1.2;
* предоставление СУБД в соответствии с п.5.4.1.3;

The Customer shall provide hardware for the System operation. Hardware requirements are determined within the framework of the project implementation in accordance with the load testing and requirements for software and hardware necessary for the System operation (clause 5.4.1.2. - clause 5.4.1.5).

* + 1. General requirements to the implemented processes

As a result of implementation of each IT management process according to Section 3.2.1, the following results shall be obtained:

* process regulations developed;
* operational documentation (including role-based work instructions for System users) is developed;
* The System is configured according to the developed process regulations.
  + 1. Requirements for the Incident/Service Request management process

Automation of Incident and Service Request management processes shall implement:

* management of Tasks based on the Incident/Service Request;
* full interaction with other processes.
  + - 1. General Requirements for Incident/Service Request Management Processes

When automating the Incident/Service Request management process, the following requirements must be met:

* an organizational-staff model is configured in the System, it must be filled with real data on the Customer's organizational-staff structure;
* the organizational-staff model should be automatically updated;
* functional Teams and groups of performers (based on the models of provision and support of IT services and IT services) are defined and configured in the System; the members of groups and Teams should be users of the System, should be assigned to the elements of OSH;
* counterparties providing external IT services are defined and configured in the System (according to the state at the time of commissioning);
* procedures have been developed and shall be configured for the following options for registration of incidents/service requests:
  + registration by the User;
  + registration by an employee of the first support line on the basis of the User's request;

Registration of requests by the User is carried out in one of three ways:

* + - using the means of self-service of Users in the System;
    - by sending a mail message with a predetermined format to a specially allocated and linked to the corporate mail system e-mail address in the domain;
    - by means of a telephone call to the first support line.
* a mechanism for informing Users about the progress of execution of Incidents/Service Requests has been developed and configured;
* categories of Incidents/Service Requests are defined and configured;
* regulations on Incident elimination and Service Request fulfillment are developed and automated;
* role model of access to the System objects for the participants of the processes under consideration is defined and configured;
* when registering a request, depending on the related IT service and the category of incident/service request, mandatory fields should be filled in according to the requirements specified in the private terms of reference;
* mechanisms for optimizing the handling of mass Incidents (caused by the same cause) have been developed and implemented;
* mechanisms for automatic assignment to the responsible team/support specialist depending on the values of the request parameters filled in during registration (with the possibility of manual assignment/reassignment) have been developed;
* mechanisms for assessing the impact of an Incident/Request on the quality of IT services and SLA fulfillment for each specific customer (consumer) of IT services have been defined and configured;
* developed mechanisms for managing Tasks when working on an Incident/Service Request (the ability to use pre-configured sequences of typical Tasks for typical Incidents/Service Requests, including templates for assigning tasks to performers based on the principle of assigning them to the competence of members of certain Teams or OSH departments);
* the possibility of assigning an Incident/Request for Service both to a functional team and to the personal responsibility of a Specialist is provided;
* a mechanism of hierarchical and functional escalation has been developed and customized;
* a mechanism for controlling the fulfillment of an Incident/Service Request with the participation of external Contractors has been developed;
* a mechanism for accounting of labor costs during the elimination of an Incident/fulfillment of a Service Request has been developed and configured;
* limit normative values of the time of each Incident/Request for maintenance in each of its statuses (taking into account certain parameters of complexity, criticality, urgency) are defined and configured;
* notification rules (events, range of interested parties, etc.) are defined and notification mechanisms (notification templates and other necessary objects in the System) are configured);
* developed and implemented means of correspondence with the User and receiving feedback from him/her when the Incident is eliminated or the Service Request is fulfilled;
* metrics of the processes under consideration are defined, reports on process metrics are configured.
  + - 1. Requirements for Task Management Mechanism

Mechanisms shall be developed and configured to::

* assignment/reassignment of Tasks;
* Tasks execution control;
* management of Tasks priorities;
* accounting of labor and time spent on Tasks execution;
* notification of stakeholders about assignment/execution of Tasks (and other events defined at the process implementation stage);
* hierarchical escalation according to certain conditions.
  + - 1. Requirements for interfacing with other processes

The implementation of Incident/Service Request Management processes shall develop a scheme and mechanisms for interaction with related IT management processes:

* Interaction with the Service Level Management process in terms of prioritizing work on the Incident/Service Request and the impact on the quality of IT services and IT services;
* interfacing with the IT Service Catalog to reflect up-to-date data on IT services affected by the incident;
* other data to be provided/received and the logic for interaction with Knowledge Management processes are defined.
  + 1. Requirements to the process of IT Service Catalog and Service Level Management

On the project of System implementation, automation of IT services and services catalog management processes, service level is limited by the scope of IT services provided by the Customer to consumers.

At realization of processes of IT-services and services catalog and service level management the following measures and requirements should be fulfilled:

* IT service classification methodology is developed, categorization and classification of IT services and technological IT services is defined and configured;
* the hierarchy of provided IT services and technological IT services is defined and customized;
* Service catalog is filled with services; mechanisms for determining the price of IT services and calculating the cost of ordered IT services are set up;
* mechanisms for calculating the actual cost of the provided IT services have been implemented;
* types of IT Service Agreements are defined and configured, including service levels/classes, response, incident resolution and SLA handling parameters according to the options specified when ordering or changing SLA/composition of services;
* Agreements for each IT service package are defined and configured for each group of IT service consumers (the mechanism should allow building "many to many" relationships: one Service can be provided under several Agreements, as well as several Services can be provided under one Agreement);
* for each IT Service and technological service a set of parameters characterizing the IT Service or technological service is defined and configured, including:
  + name;
  + description;
  + components;
  + pricing parameters for the service/service and components;
  + dependency/impact on other services/services;
  + available SLA options for this service;
  + other parameters according to the requirements of the private terms of reference for the System implementation;
* a role model of access to maintenance of the Catalog of services and services, to setting and viewing of SLA variants was developed and configured;
* normative time for processing requests (Incidents, Service Requests) has been defined;
* for each IT service a mechanism for prioritization of requests (Incidents, Service Requests), Agreements and Tasks has been developed and configured;
* role model of access to the System objects for the process participants is defined and configured;
* procedures for modifying the IT Services Catalog were developed and automated;
* procedures for editing IT Service Level Agreements were developed and automated;
* mechanisms for obtaining statistical information on Service Level Management and key performance indicators of the process were developed;
* customized reports based on defined key process performance indicators, including:
  + reports on SLA fulfillment in terms of services and service groups, consumers of IT services, departments/teams;
  + report on SLA fulfillment by types of requests;
  + report on closed overdue requests;
  + report on open overdue requests;
  + report on open requests that are at risk of SLA violation;
  + report on the terms of requests fulfillment and requests processing by contractors/employees of the Customer;
  + percentage of downtime of IT services from the total operation time in terms of service agreements;
  + report on the degree of User satisfaction with the fulfillment of requests and processing of requests;
  + report on SLA fulfillment in the context of technological IT services.
* Process metrics for controlling the provision and support of IT services have been defined;
* reports are configured.
  + 1. Requirements for implementation of the Service Level Management process

At this stage of implementation of the Service Level Management process, the following shall be realized:

* development of Services and Agreements concluded with external contractors supporting the provision of IT services;
* development of internal Services (operational level services) and Agreements (OLA), which are auxiliary to the provision of core IT services.
  + 1. Requirements for the Configuration Management process
       1. General Requirements for the Configuration Management Process

When implementing the Configuration Management process, the following elements shall be worked out:

* A Configuration Management Database (CMDB) structure is developed and customized;
* Interaction patterns with other IT management processes are developed and customized.
  + - 1. Requirements for the Configuration Database

The following requirements must be met when building the Configuration Database:

* IT infrastructure components involved in the delivery of IT services are identified;
* A classification of IT infrastructure components (Configuration Units) is developed and configured;
* For each component category defined and configured:
  + A set of KE accounting attributes;
  + A set of KE statuses;
  + A set of attributes defining necessary actions on KEs (routine maintenance, etc.
* The types of possible links (dependencies) between Configuration Units are defined;
* Interfaces for working with cards of Configuration Units are developed, taking into account the roles of specialists;;
* The configuration database is not filled;
  + - 1. Requirements for implementation of the Configuration management process

The following requirements shall be met when implementing the regulations and procedures of the process for creating, maintaining, updating, and tracking the status of the KEs:

* A role model for process participants to access System objects has been defined;
* Procedures for commissioning and decommissioning of Configuration Units are developed;
* Notification rules (events, stakeholders, etc.) are defined and notification mechanisms (notification templates, etc.) are configured;
* Process metrics are defined.
  + - 1. Requirements to the mechanisms of integration with the means of automated data collection on IT infrastructure elements

Integration with the means of automated data collection on IT infrastructure elements is not expected.

* + - 1. Requirements for interaction with other processes

When implementing Configuration Management processes, a scheme of interaction with related IT management processes shall be developed:

* The data to be provided and the logic for interaction with the Incident Management process shall be defined;
* The data to be provided and the logic of interaction with the Change Management process are defined;
  + 1. Requirements for the Change Management Process

The Change Management process shall include the following related elements:

* Management of Tasks based on the Change;
* Management of Approvals;
* Interaction with other processes;
  + - 1. General Requirements for the Change Management process

When implementing the Change Management process, the following mechanisms included in the process shall be worked out:

* A mechanism for managing Tasks is developed and configured;
* A mechanism for managing Agreements has been developed;
* Interfaces with other IT governance processes are developed and configured;;
  + - 1. Requirements for implementing the Change Management process

When implementing the Change Management process, the following results should be obtained:

* Change initiation options are identified and configured;
* Types of change are defined and customized;
* A Change process model is defined for each type of change;
* Mechanisms for assessing the impact of changes on IT services are developed and customized;
* A mechanism for assigning responsibility for implementing changes has been developed and customized;
* Templates of task sequences are developed for typical changes;
* A mechanism for managing approvals when implementing changes has been developed and configured;
* Templates of approval routes have been developed for typical changes;
* A mechanism for controlling the correctness of made changes and returning to the previous state in case of problems caused by the made change has been developed and configured;
* A mechanism for controlling the life cycle of a change has been developed and customized;
* A mechanism for informing and notifying the change initiators and other interested parties about the status of work on the Change has been developed and configured;
* Mechanisms for automatic assignment to the responsible team/Specialist depending on the attributes filled in during registration (with the possibility of manual assignment/reassignment);
* A mechanism of hierarchical escalation according to certain conditions has been developed and configured;
* The normative time of execution of Change stages, as well as the mechanism of distribution of Tasks to Specialists is performed taking into account the work mode (shift, breaks, days off, etc.);
* Role model of access to the System objects for the process participants is defined and configured;
* The mechanism of accounting of labor costs when implementing a change is developed and configured;
* Developed and customized reports and mechanisms for obtaining statistical information on changes and key performance indicators of the process.
  + - 1. Requirements for Task Management Mechanism

Mechanisms shall be developed and configured for:

* Assignment/reassignment of Tasks;
* Tasks execution control;
* Tasks priority management;
* Accounting of labor costs when performing Tasks;
* Notification of stakeholders about assignment/execution (or other events) of Tasks;
* Hierarchical escalation according to certain conditions.
  + - 1. Requirements for the Concurrence Management Mechanism

The implementation of the Reconciliation mechanism shall include:

* Formation of a route for passing an Alignment (with the possibility of using preconfigured routes);
* Possibility to organize multi-phase Concordance;
* Control of the algorithm for calculating the final decision;
* Control over the course of the Approval;
* Notification of stakeholders about the appointment (or other events) of the Harmonization;
* Hierarchical escalation according to certain conditions;
* Participation in Consents shall be available to both Specialists and Users.
  + - 1. Requirements for interaction with other processes

When implementing Change Management processes, a scheme of interaction with related IT management processes shall be developed:

* Interaction with the Service Level Management process in terms of defining the normative time for Change Management;
* Determined the data to be provided and the logic of interaction with the Incident Management process;
* The provided data and the logic of interaction with the Configuration Management process are defined.
  + 1. Requirements for integrations with external subsystems

When implementing the project, the System integration interfaces with external systems shall be developed: corporate domain, corporate e-mail, integration mechanisms for working with the Automated Electronic Document Management System.

* + - 1. Requirements for integration with mail service

Integration with mail service will be performed as part of the project. It shall ensure functioning of notification mechanisms, as well as mechanisms for receiving/registering/confirming the closure of requests, based on the logic of the processes (requirements for integration mechanisms are determined by the requirements for the processes to be implemented in clause 5.1)

* + - 1. Requirements for integration with the Catalog Service

Integration with the Catalog Service shall provide:

* Automated initial filling and periodic synchronization of the organizational and staff structure (configured in the System) with User accounts (from the Directory Service);
* Single Sign-On - end-to-end transparent for domain users authentication in the System (using Kerberos and NTLM protocols).
  + 1. Requirements for separation of industrial and test environments

Within the framework of the project a test environment shall be deployed on the Customer's infrastructure to perform preliminary testing of the performed customizations. Within the framework of the test environment a test instance of the System, equivalent to the instance of the System used on the production stand, shall be installed and configured. The test instance of the System shall have no restrictions in terms of version updates, modeling of settings, filling/migration of data by the Customer's own forces.

* + 1. Requirements for training of specialists

Within the framework of the project the following groups of employees shall be trained:

* user mentors (at each stage of the project);
* administrators;
* technologists.
  + - 1. Training requirements for Administrators

The project shall provide Administrators with the skills to:

* install the software components of the System;
* update the software versions of the System;
* manage licenses for access to the System;
* fix basic malfunctions of the System software.

Administrators shall receive basic information and disclosure of information in Russian language on the System capabilities in terms of:

* interaction with the mail system;
* synchronization with MS Active Directory (Skills should be transferred for 1 group (not less than 2 persons) not less than 8 hours.
  + - 1. Technologists training requirements

As part of the training Technologists must gain detailed understanding and practical experience on the main functionalities and customization capabilities of the System in terms of automation of user support and service delivery processes.

Skills shall be transferred for 1 group (at least 2 persons) in no less than 16 hours.

* 1. Requirements for project organization
     1. Requirements for project management organization

The project management organization must meet the following requirements:

* a formal project initiation is required, specifying project goals, objectives, functional content, project constraints, and project deadlines;
* the following roles must be defined and assigned personally in the project:
  + project manager - responsible for the overall organization, resource allocation and the result obtained, is the main point of contact for issues related to the project progress, reports to the project supervisor (appointed by the Contractor and the Client);
  + project supervisor - controls the quality of the project, accepts the results of the project, is involved in case of lack of authority of the project manager (appointed by the Contractor and the Client);
  + process consultant - responsible for designing, documenting and launching of processes (appointed by the Contractor);
  + technical consultant - responsible for setting the terms of reference, creating, documenting and launching the process automation system, including all solutions for integration with other systems and data sources (appointed by the Contractor).
* the roles of project supervisor and project manager should be assigned to different executors;
* an up-to-date work schedule shall be maintained throughout the project;
* if the Contractor (General Contractor) engages one or more subcontractors, a communication plan shall be drawn up and approved, which defines the procedure of interaction between all parties (including the Client) involved in the project implementation. The communication plan shall be provided by the Contractor;
* regular meetings with the Client's representatives shall be organized for project control, with obligatory keeping of minutes. The Contractor shall be responsible for keeping the minutes and its approval.
  1. Requirements for provision of services
     1. Requirements to the Contractor

The Contractor shall meet the following requirements:

* availability of partnership relations with the software manufacturer company (it is required to confirm by the original authorization letter of the manufacturer (reg.№, date));
* availability of a team with high qualification (it is required to confirm with certificates), including:
  + availability of specialists with certification for the software product used to finalize the system of automation of the processes being implemented;
  + availability of at least one specialist with ITIL v.3 Expert qualification;
* at least 5 years of experience in the IT process automation market using ITIL methodology;
* availability of at least 20 successful projects of implemented Service Desk systems (to provide information in the form of a reference, in this case the Customer reserves the right to contact the reference organization to clarify the results of the project).
* The Contractor must have the appropriate resource capabilities (financial, material and technical, production, labor, etc.), confirm with documents.
* The Contractor must be able to provide technical support with the possibility of emergency and preventive visits.
  + 1. Requirements to the composition of services

Services to refine IT management processes shall include the following:

* Conducting a survey of current IT operations and IT service delivery processes (incident management, service request management, work management, service level management):
  + Conducting the survey. Interviewing key users - participants of the processes of operation and provision of IT services and processes of operation of industrial equipment;
  + study of functional responsibilities of the participants of the processes of incident management, service request management, work management, service level management;
  + study of job descriptions of process participants;
  + examination of current process regulations;
  + review of current reporting and/or process metrics;
  + study of the catalog of supported IT services;
  + study of catalogs of work performed;
  + audit of the settings of the current information system used for support;
  + gathering functional requirements for process organization;
  + analyzing related information systems involved in user support processes and gathering requirements for third-party integrations.
* development of a business services catalog. Audit of the current request base to identify current quantitative and qualitative metrics for each service. Detailed characteristics are identified for each service, including:
  + name;
  + description;
  + contacts for the service, indicating the point of contact for users, the responsible person for the service on the user/functional customer side, and the service administrator;
  + hours of service provision to business users, indicating the time zone;
  + recipients of the service: serviced offices and subdivisions;
  + types of requests of business service users;
* development of process regulations (for each process):
  + process policies and boundaries;
  + process and help desk recommendations;
  + identification and approval of process owners and managers;
  + describing processes in terms of procedures, roles and tasks;
  + identification of process participants (schema development);
  + describing the schema for integration with other user support processes;
  + development of process metrics;
* development of Terms of Reference for customization of the System within the IT service delivery and support processes:
  + defining the attributes of objects in the System;
  + defining the composition of directories and other data;
  + description of templates of request types;
  + description of the System settings;
  + description of alerts, escalations;
  + description of reports, including those for calculation of key performance indicators;
  + description of requirements for processing electronic mail messages and automatic registration of requests based on them;
* development of Private Terms of Reference for integration of the System with:
  + mail service:
    - defining the logic (templates, rules, etc.) of interaction for inbound mail;
    - defining the logic (events, rules, target groups) of interaction for outgoing mail;
  + MS Aсtive Directory:
    - defining rules for importing AD objects into the System (matching AD objects to System objects, rules for importing object attributes);
    - setting up NTLM or Kerberos authentication.
  + ADMS (only in terms of a possible integration mechanism on the part of the System).
* development of the document "Test Program and Methodology":
  + defining test procedures (deadlines, responsible persons, rules for conducting tests and formalizing the results);
  + development of test scripts;
  + preparation and approval of the document "Program and methodology of acceptance tests".
* installation of the System on the Customer's equipment
  + installation of necessary third-party software;
  + basic configuration of the System.
* customization of basic functions of the System according to the agreed Technical Assignment:
  + customization of object attributes in the System;
  + customization of request types;
  + customization of task types;
  + customization of services;
  + customization of alerts and escalations;
  + customization of access rights to objects, customization of the basic set of rights for different employee profiles;
  + creation of reports.
* based on the standard mechanisms of the System, the search mechanism is configured:
  + a set of attributes by which the search is performed is defined and customized;
* conducting Acceptance tests in accordance with the test methodology::
  + passing through the scenarios of the test document "Program and Test Methodology".
* support of pilot operation of the System:
  + consulting on the use of the System;
  + elimination of remarks on the System customization in accordance with the ToR and the TOR.
    1. Requirements to the calendar plan

Table 2. Schedule

| **Stage** | **Stage Name** | **Stage Result** | **Documents** | **Responsible** | **Start date** | **End date** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Survey of current practices of user support processes. | Approved "As Is" model | Description of the current As Is model within the framework of IT services and industrial equipment operation processes. |  |  |  |
| 2 | Development of regulatory and normative documentation Approved catalog of business services | Approved catalog of business services  Adapted user support process regulations  Adapted user support process metrics | Business service catalog  User support process regulations  Role instructions of specialists  User support process metrics |  |  |  |
| 3 | Process implementation. Development of project documentation | Approved ToR for customization of basic functionality of the System within the framework of user support processes  Approved TOR for development of integration with MS AD | TOR for customization of basic functionality of the System within the framework of user support processes  TOR for development of integration with MS AD  TOR for development of integration with MS Exchange  TOR for development of integration with AMS on the basis of EMC Documentum  Test Program and Methodology |  |  |  |
| 4 | Configuration of the basic functionality of the System, development of integrations | System settings are performed  Integrations are developed  Training of users was carried out | Certificates to the participants of the training  Techno-working project  User's working instruction  Test report |  |  |  |
| 5 | Support of pilot operation | Consultations on the use of the System are provided  Remarks are eliminated or absent according to ToR for customization of the basic functionality of the System within the framework of user support processes and ToR for development of integrations | Brief technical reports  Act of putting into commercial operation |  |  |  |

* + 1. Requirements for startup procedure

Migration tools should be configured for initial filling of the System with reference information, user service history and other data essential for the System from the Customer's existing systems.

* 1. Requirements to the Complex
     1. General Requirements to the System
        1. System architecture requirements
* The System shall support client-server architecture. The user part of the System shall have a full-featured Web-interface and shall not require installation of client software for all user roles;
* The System shall be accessible using Web-browsers: Microsoft Internet Explorer 8 and above, Mozilla Firefox 3.6 and above, Google Chrome 18, 19 and above, Apple Safari 5.0 and above;
* The system shall utilize a relational Database for object storage and additional storage for attachments to allow for scalability as the amount of information stored increases.
  + - 1. Requirements for the operating environment used
* The system shall be cross-platform and have compatibility with operating systems:
  + Red Hat Enterprise Linux 4.0, 5.0 and higher;
  + SUSE Linux Enterprise Server 9 and higher;
  + Debian GNU/Linux 4.0 and higher;
  + CentOS 4.0, 5.0 and higher;
  + Microsoft Windows Server 2008 R2;
  + Sun Solaris 10 and higher for servers manufactured by the corporation.
    - 1. Requirements for relational databases to be used
* The system shall utilize any of the following relational Databases in operation:
  + PostgreSQL 9.1, 9.2;
  + Microsoft SQL Server 2008;
  + Oracle 10g, 11g.
    - 1. Requirements for the technologies used

The system shall utilize the following open source technologies:

* Web-interface of the system user should be built on HTML-5, CSS (Cascading Style Sheets), Java-script, AJAX (Asynchronous Javascript and XML);
* Web-interface development should be based on GWT (Google Web Toolkit) framework
* The System shall use Apache or Ngnix Web server as the web-server;
* The System shall use Apache Tomcat as the application server;
* Business logic of the System should be developed on the basis of Spring Framework;
* Interaction with relational DBMSs shall be implemented using Hypernate technology;
* Groovy language shall be used as an internal language for writing user scripts;
  + - 1. Требования к масштабированию и производительности

The System shall provide scalability as the number of systems to be integrated and/or users (both business users and specialists) and/or objects and records in the System increases.

With the following characteristics:

* number of simultaneously active users: 1000;
* number of objects/records in the System: 10 million;
* example of hardware characteristics:
  + Application server characteristics:
    - RAM - 16 GB;
    - processes - Intel® Core™ Quad-Core i7-3370 3.4Ghz 4 cores;
    - hard disk drives - massive 2 x 3 TB SATA 6 Gb/s hard disk drives;
    - OS - Ubuntu 12.04 LTS [Linux 3.2.0-29-generic];
  + Database server specifications:
    - RAM - 32 GB;
    - processes - Intel® Core™ Quad-Core i7-3370 3.4Ghz 4 cores;
    - Storage - massive 2 x 3 TB SATA 6 Gb/s hard disk drives;
    - OS - Ubuntu 12.04 LTS [Linux 3.2.0-29-generic]/ Win2008 Server.

The system must fulfill the following performance requirements:

* time of entering the counterparty's request list - not more than 3 seconds;
* average time of entering the request card (by link) - not more than 3 seconds;
* average time of opening an employee card - not more than 3 seconds.
  + - 1. Localization requirements
* System user interface, System documentation, documentation for specialists shall be available in Russian.
  + - 1. Interface ergonomics requirements
* The system should have an intuitive interface and high-quality ergonomics to ensure efficient work of users of different qualifications in Russian.
* The system should provide an opportunity to customize user interfaces so that for each role only the information necessary for that role is visible.
* To simplify work with large amounts of data, the filtering operation should be performed efficiently. In this case, the screen should display a part of the records, with which it is necessary to work at the moment.
* For all objects of the System the search by attributes and set of attributes should be available.
* Mass operations on objects (editing, changing of responsible persons, etc.) should be available for lists of objects. When performing mass operations on several objects, the access right to the corresponding action for each of the objects should be checked.
* The system should allow changing the number of attributes that are displayed in the request registration interface. Each specific attribute shall be displayed depending on the user's role in the System.
* It shall be possible to customize the display of additional fields depending on the selected request type and the selected service.
  + - 1. Reliability requirements
* The System shall be available in 24x7 mode (24 hours, 7 days a week), except for periods of preventive maintenance performed at a certain time not more than once a month, lasting no more than 4 hours. It is allowed to stop the System for scheduled preventive maintenance.
* The procedure of data and application backup (backup creation) shall be provided. The System must support the possibility of restoring data and application from a backup copy (backup).
* A test environment must be deployed (to simulate settings).
* An Administrator must be trained to maintain the test and production environment.
  + - 1. Security requirements
* Access to the System shall be through user accounts. It is required to provide restricted access to the database used by the System. Login to the System is allowed only with login and password, and the login to the System can be performed both manually, by entering login and password into a special form in the interface, and automatically (on the basis of accounts from the Directory Service, integration with the Directory Service via NTLM or Kerberos protocol), using the method of end-to-end authentication (Single Sign-On).
* The system must support operation via https-protocol, provide access control using SSL algorithm.
* Registration of events of access subject's entry (exit) to the System (from the System) shall be performed. Registration parameters shall specify:
  + date and time of access subject's entry (exit) to the System (from the System);
  + IP-address;
  + Login.
    - 1. Requirements for modification and compatibility capabilities
* The System shall be a replicable solution.
* When upgrading to a new version of the System within the second digit (within "minor" versions):
  + The upgrade must be free of charge, within the scope of the current technical support;
  + compatibility with the previous version of the System within the second digit must be maintained;
  + must retain:
    - settings of data exchange with external systems;
    - settings of user profiles (setting of access rights to information);
    - amount of information at the moment of installation of the new version.
* when migrating to a new version of the System within the first digit (within "major" versions):
  + services on transition to a new version should be determined based on the number of customizations made in the version of the System used by the Customer;
* the possibility of System modification by the Customer's specialists after the appropriate training and certification should be provided;
* modification of the System - customization of the logic of processes, interfaces and user rights shall be carried out through a special interface of product customization, without the need to modify the "core".
* the System shall allow the Customer to integrate with external subsystems using standard integration mechanisms built into the System.
  + - 1. Requirements for compliance with ITIL best practices

The system shall comply with ITIL v.3.1 methodologies (confirmed by providing a letter from the software manufacturer with supporting original documents attached).

* + 1. Requirements to functional subsystems
       1. Components of the System

The System shall include the following logical subsystems:

* subsystem of the user's personal cabinet;
* subsystem for managing user support and requests (incident management);
* subsystem for managing services and service level;
* Knowledge Base management subsystem (knowledge management);
* problem management subsystem (problem management);
* organizational and role structure management subsystem;
* e-mail processing subsystem;
* integration subsystem;
* universal data import subsystem;
* subsystem of rights management.
  + - 1. User personal account subsystem

The system shall provide access to a personal account for each supported user. The personal cabinet shall provide the following capabilities:

* viewing and changing data about the employee:
  + viewing general information: full name, position, supervisor, login;
  + edit contact information (for manual users);
  + changing the password (for manual users);
* viewing the knowledge base and searching in the knowledge base;
* registering requests:
  + registering a request using the assistant;
  + attaching files when registering a request;
* viewing information about your requests:
  + viewing a list of requests;
  + viewing general parameters, current status, and planned closing date of the request;
  + viewing files attached to the request;
  + adding and deleting their files;
  + viewing comments on the request;
  + adding, editing, and deleting your comments;
* viewing information about their approvals, implementing approvals:
  + viewing a list of approvals received;
  + viewing detailed information about each approval;
  + approval or rejection of works submitted for approval according to the specified deadlines;
* automatic notification of users about events related to the request: adding a comment, transferring requests to the "Resumed" or "Resolved" status.
  + - 1. Subsystem of User Support and Request Management (Incident Management)

The main task performed by the subsystem is the automation of the following subprocesses: User Interaction, Incident Management.

##### In terms of registering Requests

In terms of registering requests, the subsystem shall provide:

* a single point of reception and registration of all Requests and user requests related to the use of services (hereinafter referred to as Requests) in a single database storing all operational information on Requests;
* registration of a request by the operator using a web-application (thin client);
* displaying to the operator at the moment of registration information about already open requests of the given user;
* automatic registration of requests by means of e-mails that arrive in the assigned mailboxes. The addresses of the assigned mailboxes are set in the System settings;
* own Web-interface and means of integration with external personal cabinet to provide users with opportunities to register requests, view information on their requests, confirm closing of their requests;
* use of classifiers and directories for efficient filling and modification of records of the Requests base through the Requests cards:
  + identification of the user who has applied;
  + identification of services provided and available to the user;
  + identification of the user's current requests;
* categorization and identification of other necessary parameters to ensure the management of Requests, in particular:
  + impact;
  + urgency;
  + priority;
  + level of service;
  + Request resolution timeframe;
* possibility to set additional parameters for categorization, detailing of the request description with determination of their mandatory filling during registration (and during further processing of requests);
* flexible customization of request numbering using templates;
* possibility to attach files in text and graphic formats to the request.

##### In terms of passing Requests

In terms of passing requests, the subsystem shall provide:

* means for entering additional information and changing the priority of a Request throughout the entire Request lifecycle (after its initial registration until its closure);
* manual and automatic transfer of the incident for its resolution both to specialized support lines (functional units) responsible for support and provision of the relevant service, and to personal responsibility of a certain Specialist;
* means for monitoring the status of a Request throughout its life cycle;
* information about already existing Requests, known problems, which are similar (analogous) to newly received ones and ways of their solution;
* means of tracking the detailed history of events for each Request;
* means of keeping track of dependencies between requests;
* means of keeping the list of comments on the Request, with division of comments into internal (visible to employees) and general (visible, including to the user himself).

##### In terms of control over fulfillment of regulations on Requests

In terms of control over the fulfillment of regulations on Requests, the subsystem shall provide:

* servicing of Requests, determination of the maximum time to eliminate a Request, taking into account the priority of the requested user or the affected service;
* control of the start and completion time for each Request;
* accounting of the total time of Request processing in the support service;
* accounting of processing time in each of the states and by each of the responsible specialists;
* control of exceeding the normative time allocated for the elimination of the Request;
* sending notifications by e-mail in accordance with the settings made (by events, by regulatory deadlines).

##### In terms of closing Requests

In terms of closing Requests, the System shall provide:

* when closing a Request, the System shall provide an opportunity to enter a description of the solution:
  + entering confirmation from the user that the Request has been resolved;
  + entering a description by adding text;
  + selecting the description of the solution result from the list of typical solution descriptions;
* automatic notification of users about the completion of processing of their requests with the possibility to confirm or deny the success of the solution directly by e-mail and through the self-service web-portal;
* in case of impossibility to receive confirmation from the user, the system should automatically close the request after a regulated period of time. The operator should be able to "postpone" the automatic closing of the Request for a certain period of time for a second attempt to receive confirmation.

##### In terms of customizing the "workflow" of Requests

In terms of customizing workflow of Requests the System shall provide:

* support of different types of requests, each of which defines the processing route, the list of responsible employees and departments;
* possibility to create your own types of queries, specifying rules and restrictions for transition between states, rules for filling in user parameters when changing states;
* assignment of objects to work both personally and for a group of specialists;
* customization of the list of tasks that make up the execution of Requests;
* accounting of the total time of work on the Request;
* accounting of the time of fulfillment of a Request by each specialist who participated in its solution;
* possibility to customize functional and administrative escalation of a Request in accordance with the configured escalation conditions;
* automatic transfer of responsibility for the Request when the status of the Request changes;
* execution of a certain operation on several selected objects (mass processing);
* construction of logical links in cases when work on one process leads to initiation of another process.

##### In terms of work order management

In terms of work order management, the System shall provide:

* create and manage the work orders that need to be executed to fulfill a Request;
* providing a mechanism for controlling the closing of a Request, taking into account the fulfillment of related work orders;
* setting up the process of execution (sequentially/parallel) of the specified work orders as authorized by the Request;
* management of the work order queue and their execution schedule;
* notification of the initiator about the work order closing.

##### In terms of handling mass requests and accidents

In the part of work with mass requests and accidents the System shall provide:

* registration of system failures initiated by specialists;
* separate registration of user requests and system failures, with the possibility of building a logical connection between them;
* the possibility of building a logical connection between the Requests. Including the possibility of forming mass incidents and the possibility of linking repeated incidents to previously opened mass incidents shall be realized.
  + - 1. Service and Service Level Management Subsystem

The subsystem shall be a supporting subsystem for the operation of the User Support and Request Management subsystem.

The subsystem shall perform:

* creating, efficiently accessing, navigating, editing, and storing catalogs and data on services or service packages provided;
* creation, deletion, archiving, editing, and the ability to synchronize with external service storage systems;
* input, storage and access to service level data (SLA);
* regulation of conditions of user service, work with requests within the framework of provided services, including:
  + a list of possible requests for a given service, with indication of service priority and units responsible for Request resolutions;
  + data on the normative time for resolving the Request, depending on the priority of service, class of service (time period of service provision) and criticality of the Request (degree of impact on service provision);
  + data on the Request escalation procedure, depending on the priority;
* maintaining a history of events for each service;
* control of the current status of services;
* classification of services into business services and operational services;
* means of integration with automatic inventory systems for linking services with the equipment by means of which they are provided.
  + - 1. Knowledge Base Management (Knowledge Management) and Search Subsystem

The subsystem is designed to capture known solutions, workarounds and typical instructions. Access rights to this information are granted depending on user roles.

The subsystem shall perform:

* reation and support of the Knowledge Base on known solutions;
* accumulation of the knowledge base on diagnostic methods and solutions for recurring incidents;
* management, input, structuring and provision of information stored in the subsystem;
* efficient navigation through the subsystem directories;
* effective use of accumulated knowledge on identification, elimination and prevention of incidents;
* provision of useful for users information about services and rules of their use (obtaining, disconnection, changing);
* forming links in sections, subsections and articles to other sections, subsections and articles;
* managing access rights to different sections of the Knowledge Base, depending on the user's role, and granting personal access to certain sections with the rights of an expert (editing) or reader.
* receiving electronic mail notifications about changes in the Knowledge Base sections and articles of interest.

In terms of search the subsystem should perform:

* extended model of records search by object categories;
* extended model of records search by attributes of related objects.
  + - 1. Organizational and role structure management subsystem

The organizational and role structure management subsystem is a subsystem that ensures the functioning of the user support and request management subsystem.

The subsystem shall perform:

* create, efficiently access, navigate, edit, and store catalogs and data:
  + on the Customer's organizational and staffing structure;
  + on the role groups of services supporting services and the staff within them;
* management of relationships between departments/groups within the framework of request processing;
* - synchronization of the organizational structure with external sources, including MS Active Directory via LDAP protocol.
  + - 1. Subsystem for processing e-mails

The subsystem is designed to organize work on User Requests received electronically..

The subsystem shall provide:

* possibility of integration with the mail system. Protocols used for receiving mail: IMAP, POP. Protocols used for sending mail: SMTP;
* setting up periodic downloading of mail from one or several mailboxes;
* mail message parsing: by header, sender's address, tags in the body of the mail, determination of such parameters of the registered request as: user, service, type of request, urgency, etc.;
* possibility to form processing logic in such a way that unrecognized requests are not registered (in this case an auto-reply is sent to the user) or are registered with "default" settings and further processed by the operator;
* the ability to filter out spam using white/black lists;
* possibility to attach the initial user e-mail in \*.eml format;
* possibility to attach files received in the e-mail to the request in the System. Possibility to customize the rule, according to which only certain extensions will be processed (For example: attached files of jpg, gif, png, txt, htm and html format are attached to the request, and e-mails containing files with other extensions are not registered);
* possibility to distribute a request to a group or a specific specialist depending on the selected request type and other parameters;
* possibility to view the list of e-mail messages by User Request or the system as a whole, with the possibility to view the original message;
* possibility to send a message to the user from the card of the request registered on the basis of the electronic request (in this case the text of the message is formed manually or on the basis of the directory of automatic responses);
* logging of mail message exchange, with the possibility of displaying and filtering by the following fields:
  + date/time of receipt of the electronic appeal;
  + date/time of processing the e-mail
  + sender's e-mail address;
  + e-mail address of the recipient;
  + number of the registered request;
  + reason for rejection of the e-mail;
  + status of the request: not received due to internal error/received and processed/received but not processed.
    - 1. Integration Subsystem

Technologically, the System shall support integration using the following technologies:

* WebService. Access through WebService API to the main functions of the System shall be provided, and it shall be possible to access external systems using WebService technology;
* data transfer between systems in the "request-response" mode via HTTP protocol. Both XML-documents and arbitrary text or files can be transferred via HTTP;
* remote RPC-call of a method via http, with passing additional parameters;
* direct access to the database from external systems for reading;
* direct access to the database of external systems. Supported databases: MySQL, Postgres, Oracle 9/10/11, MS SQL 2005/2008;
* synchronization of systems via intermediate database;
* file exchange. The file can be a structured XML of a specified format;
* data exchange by e-mail.
  + - 1. Universal data import subsystem

The System shall have a universal data import mechanism, which shall provide the following capabilities:

* import of data on the System objects from an external source of .csv format;
* synchronization of data on objects stored in the System with data from external .csv files;
* import and synchronization of any set of system and user attributes of objects from external .csv files;
* generation of reports based on the results of data import and synchronization.
  + - 1. Rights management subsystem

The rights management subsystem provides:

* assigning to users a set of roles/profiles of rights in the System;
* organization of access to the System for employees who have been given access details (login, password);
* delimitation of access rights to the functions of subsystems and modules in accordance with the roles/profiles;
* delimitation of access rights to information of subsystems and modules in accordance with roles/profiles.
  + 1. Related requirements to the System
       1. Documentation requirements

Russian-language documentation for the System shall be provided in the following composition:

* for users:
  + user manual;
* for technologists:
  + System customization manual;
  + manual on customization of Reports;
  + manual for setting up the universal import;
  + description of the System Database structure;
* for system administrators:
  + project;
  + System administrator's manual;
  + technical conditions of the System operation.
    - 1. Personnel training requirements
* The following groups of specialists shall be trained on the System:
  + tutors users of the System (for further transfer of knowledge to end users);
  + System technologists;
  + System administrators;
* All methodological materials provided as part of the training shall be fully in Russian..
  1. Requirements for documents to be developed

The following documents shall be developed and provided as part of the project:

* календарный план проекта;
* project calendar plan;
* project charter;
* a report on the survey of current IT management practices and the status of processes;
* IT management process regulations;
* IT services catalog;
* report on the System installation;
* Terms of Reference for customization of the System;
* private terms of reference for integration with the postal service;
* private terms of reference for integration with the Catalog Service;

Structures of project documents are given in "Appendix 1. Structure of project documents".

* 1. Требования к технической поддержке
     1. Requirements to support parameters

Technical support shall be provided within 1 year after the System is put into commercial operation.

Support shall be provided in accordance with the following parameters::

* support service operation schedule: 24\*7;
* Russian-speaking support specialists in the Russian Federation (in case of telephone contact);
* prioritization of incidents, response time to incidents of the first priority not more than 2 hours;
* acceptance of requests via Web-interface, e-mail and telephone with fixed regulations of problem solving, possibility of informing the Customer's contact persons and escalation of service requests;

Table 3 Response and request fulfillment period

| **Request priority** | **Request acceptance period** | **Request processing period** | **Request fulfillment period** | **Request response time, working hours** | **Request fulfillment time, max.** |
| --- | --- | --- | --- | --- | --- |
| 1 | 24\*7 | 24\*7 | 24\*7 | 0,3 | 2 hours |
| 2 | 24\*7 | 24\*7 | 24\*7 | 0,3 | 4 hours |
| 3 | 8\*5, 09:00-18:00 MSK | 8\*5, 09:00-18:00 MSK | 8\*5, 09:00-18:00 MSK | 2 | 3 working days |
| 4 | 8\*5, 09:00-18:00 MSK | 8\*5, 09:00-18:00 MSK | 8\*5, 09:00-18:00 MSK | 2 | 10 working days |

* + - 1. Description of request priorities

Table 4: Description of request priorities

| **Priority** | **Brief description** | **Indicators** |
| --- | --- | --- |
| **Priority 1** | The System is completely inoperable | Actions to confirm inoperability are performed by a specialist who has passed the Administrator course:  When a request is made on the installation server (when accessing the System locally), there is no access to the System web-interface (or System loading is interrupted by an error message). |
| **Priority 2** | A significant portion of the System functions are not performed, or there is a significant degradation of the overall System performance | Actions to confirm inoperability are performed by a specialist who has passed the Technologist course.  Inoperability of a part of functions in the System is detected for more than 5 minutes, and execution of key support processes (requiring prompt response: incident management process, task management) is blocked, which is guaranteed to lead to violation of SLA with the Customer's business.  **OR**  There is a delay of more than 14 seconds in the implementation of a request made on the installation server (when accessing the System locally while working with the forms of the processes: incident management, event management process, and task management).  For example:   * Inability to authorize part of the support specialists to the System; * absence of part of Incident Management functions in the System, which were configured within the project. |
| **Priority 3** | System performance degradation, inoperability of one or more functions of the System. | Actions to confirm the inoperability by a technologist trained by the Technologist.  Inoperability of functions that increase the likelihood of SLA violation with the business:   * but not blocking the operation of the process (malfunction of reports, alerts, integrations with external systems: inventory, document management), or * blocking the operation of processes: service Request management, Knowledge, Service Level, Alignments.   **OR**  Requests executed on the installation server (when accessing the System locally when opening forms of the web-interface of the System) are executed with a delay of more than 10 seconds. |
| **Priority 4** | Services for making changes to the IS, installation of updates and patches, and other services that require planning and prior agreement on the terms of fulfillment. | Requests that do not fall under priorities 1-3 (including requests to install updates, requests to change the System settings). |

* + 1. Requirements to the composition of services provided within the framework of support

Within the framework of technical support, the Contractor shall provide the following set of services:

* восстановление работоспособности Системы, устранение инцидентов и проблем в Системе;
* restoration of the System operability, elimination of incidents and problems in the System;
* installation of updates and corrections of application software versions;
* Providing access to the constantly updated knowledge base containing articles on the procedure of searching and eliminating incidents and problems in the IS;
* Providing access to a constantly updated knowledge base containing articles on methods of implementing changes;
* provision of updates and corrections of application software versions with eliminated identified errors;
* elimination of detected errors in the application software within fixed terms;
* elimination of incidents and problems in the System caused by actions of the Customer's employees;
* localization of incidents and problems in the System caused by errors or settings in third-party software, equipment, communication lines;
* analyzing the causes of incidents and problems in the System and providing a report;
* installing updates and version patches during non-regulatory time;
* DBMS administration
* development of solutions for changing the System settings, with analysis of the current System settings;
* development of reports analyzing the current System settings;
* development of scripts, import configurations, analyzing the current System settings;
* changing technical settings of the System software;
* transfer of the System to other hardware (if necessary);
* verification of correctness of execution of the function or functions of the System, upon request;
* providing a dedicated analyst;
* performing customized enhancements to application software;
* receiving and processing support requests, documenting the history of requests fulfillment;
* providing access to the Customer's personal cabinet in the information system of request management; providing access to automated reports in the information system of request management
* providing access to automated reports in the information system of request management;
* independent prioritization of requests by the Customer;
* personal support project manager.

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   2. Project Client
   3. Project Contractor
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   5. Basis for Project execution
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   2. Project Objectives
   3. Justification of the need to carry out the Project
5. Methodology Review
6. Project Plan
7. Evaluation Criteria for the Project
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   1. Project Structure
   2. Personal composition of the Project team
      1. Description of roles on the Client's side
      2. Description of roles on the Contractor's side
      3. Responsibilities of Project Team Members
   3. Interaction between the parties
      1. Communication planning
      2. Meetings and Conferences
      3. Reports
      4. Responsibilities of Project Team Members
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Approval sheet

| **Name of the organization, enterprise** | **Position** | **Full name** | **Signature** | **Date** |
| --- | --- | --- | --- | --- |
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