

**Specifications for Registrars' Interaction
with Flexireg Domain Registration System**

Version 1.1.

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1. Terms and definitions

Attribute is a string (field) of information that has a predefined identifier.

Object is a given set of attributes that has a unique identifier in Registry.

Registry is the collection of records structured as objects and stored in the database.

Database is the database storing the domain name registry intended for delegation and maintenance of domain names after their registration.

Domain is a Registry's object with the domain name acting as the identifier.

Subordinate means a level that is lower than the previous level.

For example:

a second-level domain is subordinate to a top-level domain, while a third-level domain is subordinate to a second-level domain, and so on.

Object management – ability to change information in object attributes.

Transfer (object transfer, domain transfer) – inter-Registrar transfer of object sponsorship.

Foundation for Assistance for Internet Technologies and Infrastructure Development (FAITID) is legal entity acting in accordance with the Russian law, accredited by ICANN, which is located at: 2 Marshal Zhukov Avenue, Moscow, 123308, Russian Federation (Registry Operator).

FAITID's official website: www.faitid.org.

flexible Internet registry domain name registration system (flexireg, registration system, flexireg domain registration system, flexireg system) – a set of FAITID's hardware and software complex intended for domain registration in Registries, storage of records about registrants, domain delegation, and Registry accessibility.

ICANN means the Internet Corporation for Assigned Names and Numbers which exercises a general control of the domain name system and IP address space, including the development of terms and conditions, and makes provision for the root server functionality.

Trademark (Trademark or service mark) means an image used for individualization of goods, work or services delivered by legal entities or individuals, registered as a trademark under the applicable national or regional legislation with the federal executive authority for intellectual property or in trademark register of the appropriate jurisdiction.

Trademark Clearinghouse (TMCH) – a Trademark Repository for brands protection.

The TMCH functions include: (i) authentication of contact information and verification of Trademark record, and (ii) storing such records in TMCH database to provide information to the new gTLD Registries.

Registry Operator is a legal entity responsible for the operation of Registry supported by flexireg Registration System and authorized to develop domain registration rules and other domain registration documents and policies.

Registry Holder is a legal entity that performs all or part of the functions of technical support and maintenance of Registration System of domain names under Registry Operator's agreement. The functions of Registry Holder may be undertaken by Registry Operator .

Registrar means a registrar that meets Registry Operator's requirements that has passed Operational Test and Evaluation of Registry Holder to provide domain registration services in TLDs supported in Domain Registration System.

Registrant is an individual or a legal entity in whose name a domain name is registered in the Registry. Registrant defines the procedure for domain name use, bears the sole responsibility for its selection and potential infringements of third parties' rights with regard to selection and use of the domain name, and is liable for any losses related to such infringements.

2. Introduction

This document "Specifications for Registrars' Interface with flexireg Domain Registration System" provides information required for interaction between Registrars with the flexireg Domain Registration System.

The document outlines the general interaction procedure with the Registries of any domains, which data are stored in flexireg Domains Registration System.

The specifics of domain name registration in Sunrise, Landrush, Claims registration periods are available in individual documents during such registration phases for the corresponding Registries in flexireg Domain Registration System.

Whereas, subject to Domain Name Registration Policy developed by the Registry Operator for the corresponding administered TLD, domain name life cycle periods, the availability of a specific life cycle, the possibility of IDN registrations may vary, the configurations of the flexireg Domain Registration System for Registrars' interaction with each Registry are given in the [Technical Policy of the REGISTRY_NAME Registry](#)", where REGISTRY_NAME is the TLD supported in the Registry Registration System, in which Registry or Registry group united by a single technical policy is registered.

The [Examples of EPP requests and responses](#) to the flexireg Registration System are given to show EPP queries to the Registration System and responses from it in various domain name life cycles.

Registrars are granted accesses to the Operational and Test Registration Subsystem. Operational Registration System stores all data on registered domains and generates a zone file for delegation of domains on DNS servers.

Test Registration Subsystem is similar to Operational Registration System. Test Registration Subsystem is intended solely for Registrar's Operational Test and Evaluation. In this case no real delegation of domain names registered in this subsystem will be held. Differences in settings of Operational and Test Evaluation Subsystem, if any, are given in the Technical Policy of the REGISTRY_NAME Registry.

3. Granting access to flexireg Domain Registration System

To get access to the Domain Registration System, Registrar will be required to:

- provide the necessary information to the Registry Operator and execute a Registry-Registrar Agreement for the corresponding TLD. After executing the agreement, Registry Operator will generate and provide authentication details and other information to the Registrar for getting access to the Test Registration Subsystem for OT&E procedure.
- Registrar will be required to undergo OT&E procedure outlined in the document of the same name for the purpose of testing the interaction of Registrar's software with the Registration System. OT&E will be held on a Test Registration System as per [Operational Test and Evaluation Certification Procedure](#).
- If testing proves successful, Registry Operator will activate the Registrar's access to the Operational Registration System and give access details to the Registrar.

Access to the Test Registration Subsystem granted during agreement signature is valid for the effective term of the agreement between Registrar and Registry Operator.

4. flexireg Domain Registration System features

4.1. Multi-tier structure

Registration system is intended for simultaneous functioning of Registries of multilevel domain names. It means that the Registration System is capable of supporting Registries of top, second and further levels. Additionally, access to a certain TLD Registry is defined by the agreement between Registry Operator and Registrar. A part of Registries supported by the Registration System may be available for the Registrar based on one agreement between the Registrar and Registrant of these domains, another part of Registries of supported domains may be available to the Registrar based on another agreement between Registrar and Registrant. The number of such parts, and, consequently, the agreements concluded with the registrants of corresponding TLD zones is unlimited. Additionally, it is understood and agreed by Registrar that each agreement defines for Registrar individual access details (authorization) to different TLD Registries and an individual Registrar's account thereunder.

4.2. Flexible life cycle

Registration System provides TLD Registry support with various life cycles. In this case, various Registries may establish not only various life cycle periods of a domain name, but some periods may be missing.

A domain life cycle is determined by the applicable Registry Operator in the [Domain Registration Policy](#). This document outlines the description of the standard life cycle of the domain name, but specific values of life cycle periods and their availability for each domain supported by the Registry TLD Registration System are given in the [Technical Policy of the REGISTRY_NAME](#).

4.3. Compliance with Standards

Registration System is implemented in accordance with ICANN requirements and the following standards:

- RFC 5730 – Extensible Provisioning Protocol (EPP);
- RFC 5731 – EPP-Domain Name Mapping;
- RFC 5732 – Extensible Provisioning Protocol (EPP) Host Mapping.
- RFC 5733 – Extensible Provisioning Protocol (EPP) Contact Mapping;
- RFC 3915 – Domain Registry Grace Period Mapping for the Extensible Provisioning Protocol (EPP);
- RFC 3735 – Guidelines for Extending the Extensible Provisioning Protocol (EPP);
- RFC 4033 – DNS Security Introduction and Requirements;
- RFC 5910 – Domain Name System (DNS) Security Extensions Mapping for the Extensible Provisioning Protocol (EPP);
- RFC 6840 – Clarifications and Implementation Notes for DNS Security (DNSSEC).

The requirements for the following documents have also been implemented:

- IRTP (Inter-Registrar Transfer Policy);
- draft-lozano-tmch-smd-03 – Mark and Signed Mark Objects Mapping;
- draft-tan-epp-launchphase-11 – Launch Phase Mapping for the Extensible Provisioning Protocol (EPP);
- draft-ar-tmch-epp-mapping-02 – Trademark Clearinghouse Extension Mapping for the Extensible Provisioning Protocol (EPP).

4.4. Architecture of flexireg Domain Registration System

Domain registration system is implemented on two single-type, geographically dispersed units linked with high-speed channels. These units operate in a master-slave mode ensuring the required redundancy of data and secured functioning of the Registration System.

4.5. Structure of flexireg Domain Registration System Unit

Registrar's queries to the Registration System go to the Application Servers. EPP interface is used for interaction with the Registry. Web interface is used for the access to the Registrar's account manager.

Application Servers exchange information with the Registries' database.

Data stored in each Registry Database is used to generate zone files, which are signed according to DNSSEC mechanism and transferred to DNS servers in order to delegate the registered domains.

To give information about registered domains to the Internet users, some of the information from the Registry is replicated to one Whois server for the users and another Whois server for Registrars.

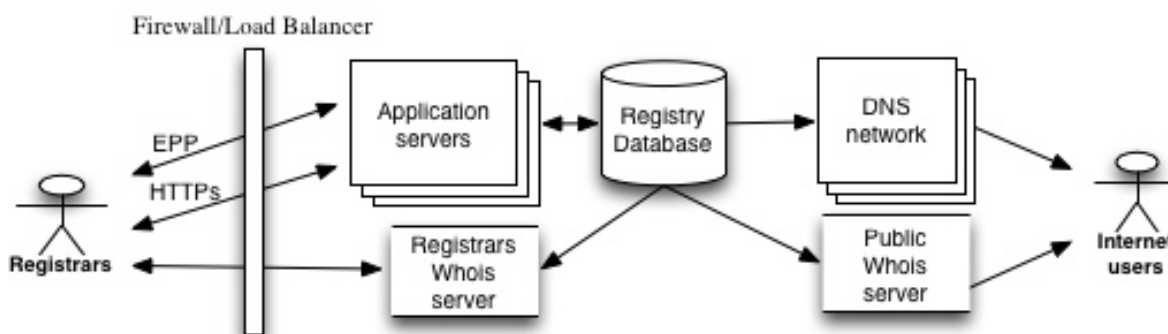


Figure 1

4.5.1. Application Servers

Application Servers are used to organize interaction of Registrars with the database containing information of TDL Registries. Application Servers use web and EPP interfaces of the Registration System.

4.5.2. Database

Database stores TLD Registry information. Database is intended for:

- storing Registrar information;
- checking if domain names subject to registering match trademarks included in the TMCH, as well as exchanging such information with the TMCH;
- registration of domain names of any level;
- storing information about Registrants, so that they could be identified;
- monitoring registration terms;
- storing information about DNS servers to which registered domains are delegated;
- managing domain delegation;
- informing Internet users about registered domains and their Registrants;
- updating information about domain names, Registrants, DNS servers, and Registrars.

Database is intended for performance of the following operations pursuant to Registrar's requests:

- checking the availability of registration of Host, Contact, Domain objects;
- registering Contact object;
- getting information from Contact object;
- changing information in Contact object;
- deleting Contact object;
- registering Domain object;
- obtaining information from Domain object;
- changing information in Domain object;
- sponsorship transfer of Domain object to another Registrar;
- deleting Domain object;
- redeeming Domain object during Redemption Grace Period;
- registering Host object;
- obtaining information from Host object;

- changing information in Host object;
- deleting Host object;
- managing domain name delegation.

4.6. DNS Network

Domains are delegated to the networks of DNS nodes located in different regions and countries, which ensures 100-percent availability of the service and Registration System.

Information in zone files is updated no less than every hour.

4.7. DNSSEC Support

All zone files supported by the Registration System may be signed using DNSSEC. DNSSEC use policy is available in the [Technical Policy of the REGISTRY_NAME Registry](#).

4.8. Whois Service

The Registration System includes Whois servers that may be used by any Internet user for obtaining information about registered domain names.

Registrars are granted access to specific Whois servers.

Format and/or scope of Whois server response may vary subject to the TLD Registry the query is addressed to.

5. Interaction with flexireg Domain Registration System

Registrars interact with the Registration System through the following interfaces:

- Web interface for access to the Registrar's account manager;
- EPP interface for access to the Registration System via EPP protocol;
- Whois interface to the publicly available Whois service about registered domains.

5.1. Limitations of Access through Interfaces

Access to the Registration System through EPP and web interfaces to Registrar's account manager is limited by IP addresses and SSL certificates. Initially, the Registrar gets access through IP addresses it lists when executing the Registry-Registrar Agreement. Registrar may later change this information by submitting a request to the Registration System support service.

Specific parameters of access limitation for each Registry are shown in the [Technical Policy of the REGISTRY_NAME Registry](#).

Users' access to Whois servers may be restricted when the frequency of requests exceeds the value that may result in server overload (in case of a network attack). The restrictions are imposed according to publicly available [Whois Service Terms of Use](#) (active link on this document is issued for each response of Whois server).

Registrars are granted access, which is unlimited in traffic and number of queries, to a specific Whois server.

5.2. Web interface

Web interface is implemented on the Application Server and intended for Registrar's access to its account manager with information about:

- Funds transferred by Registrar to its personal account in the Registration System, use of money for getting the services, and available balance;
- Events related to the operation of the Registration System.

5.3. EPP interface

EPP interface of the Registration System is implemented on the Application Server and intended for Registrars' interaction with the Registration System through the Extensible Provisioning Protocol (EPP).

Access through this interface will be provided only after Registrar's authentication in the Registration System.

Interaction through EPP is done with information blocks structured in accordance with the XML specification.

Three types of blocks are used:

- *Request*. To perform a command, Registrar sends to the Registration System an information block containing an object's identifier, a command to be performed with this object, and, if necessary, parameters.
- *Response to request*. In response to a request, Registry returns to the Registrar an information block with the performance results, containing either confirmation of procedure performance in the Registry, or an error message with the error code.
- *Notification*. An information block generated by the Registration System for Registrar, if any event in the Registry requires a notification of Registrar.

Each subsequent request to the Registration System may be submitted only after a response to the previous request is received.

EPP extensions used for each Registry in the Registration System and maximum number of requests to the Registration System per unit of time are outlined in the Technical Policy of the REGISTRY_NAME Registry.

EPP protocol extensions are given in the [Description of EPP Extensions](#).

5.4. Whois interface

Whois interface is implemented on the Whois server in accordance with [RFC 3912](#), in order to inform Internet users about second-level domain names registered in the TLD, as well as their Registrants and statuses.

For each domain supported by the Registration System, Whois service is available on TCP ports 43 and 80 (WEB-based whois).

6. Object Registries of flexireg Domain Registration System

Subject to configuration mode in the database of the Registration System, the number of Registries for different types of objects may vary: Registrar, Contact, Host, and Domain.

The mode in which one Registry for each of the Contact Host, and Domain type objects is implemented is called a **brand mode**.

The mode in which one Registry for each of the Contact and Host type objects, but several Registries for Domain type objects is implemented, is called a **flex mode**.

Configuration mode of the Registration System for each TLD Registry is given in the Technical Policy of the REGISTRY_NAME Registry.

6.1. Information in different type objects

- Registrar. Contains information about Registrar;
- Domain. Contains information about domain name, status of delegation, and connections with Registrar, Contact, and Host objects.
- Contact. Contains information about the contact. In this case, each Contact type object may be used for domain registration in one of the following parts:
 - Registrant. Contains information about domain Registrant; this object is mandatory for registration.
 - Admin. Contains information about administrative contact.
 - Tech. Contains information about technical contact.
 - Billing. Contains information about billing contact.
- Host. Contains information about DNS server that may be used for domain delegation and connections with Registrar and Domain objects.

6.2. Model of object links:

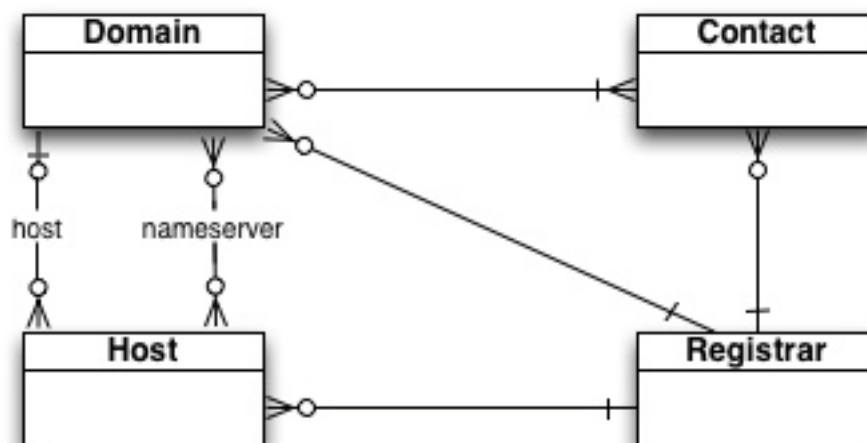


Fig.2

- Registrar is capable of managing a set of unique Domain, Contact, Host objects; Domain object managed by the Registrar shall be connected with at least one Registrant-type Contact object;
- Domain object managed by Registrar may be connected with one or more Admin-, Tech-, and Billing-type Contact objects;
- Domain object managed by Registrar may be connected with unlimited number of Host objects, both subordinate to the domain and external Host objects.
- Contact object managed by Registrar may be connected with many Domain objects of any Registrar;
- Host object managed by Registrar may be connected with many Domain objects of any Registrar;
- subordinate Host object may be connected with only one domain, to which it is subordinate.

6.3. Domain type object Registry

For each domain to be registered in the Registration System, a separate Registry for Domain type objects is provided. Therefore, database of the Registration System in flex mode is capable of simultaneously supporting several domain Registries of any level.

6.4. Registration of Contact type objects

Contact type objects are stored in flex mode in Unified Registry for database Contact objects. Contact type object registered by one Registrar may be used for domain registration by another Registrar. Contact type object registered in the Registry and used as a Registrant type contact in the registered domain of one of the Registries may be indicated as a Tech type contact in another domain from another Registry. Default contact type objects may be used during domain registration in any Registry of domains supported by the Registration System.

In the event of configuring a brand mode for a specific Registry, specific Registries for Contact type objects may be created which differ from those used in flex mode. Therefore, for domain registration in such specific Registries, only objects from these specific Registries for Contact type may be used.

Registrar, whose identifier is indicated in Contact type object, has access for viewing and changing all attributes of Contact type object. Another Registrar who has AuthInfo access code is granted access for viewing all attributes of the Contact type object in the same manner.

6.5. Host type object Registry

In flex mode configured system there is one Registry of Host-type objects. In this Registry, each Host object has XX.YY.TLD identifier, where XX. is a DNS server name, YY.TLD is a domain name with respect to which DNS server is subordinate.

Host objects with the names subordinate to any domain registered in the Registries of the Registration System refer to internal Host class and shall include at least one IPv4 and/or IPv6 address of DNS server. Host objects whose names are not subordinate to the domains registered in the Registries of the Registration System refer to external Host class and may not include any IP addresses.

Host type object registered by one Registrar may be used for domain registration by another Registrar. Host type objects in flex modes may be used for domain delegation from different Registries.

Registrar managing domain, to which Host object is subordinate, has access for changing attributes of Host type object.

6.6. Object statuses

Every object in the Registry has a mandatory attribute – a set of statuses.

Statuses starting with "server" are to be set and removed by the server procedures of the Registration System (*server statuses*).

Statuses starting with "client" are to be set and removed by Registrar (*client statuses*) using the requests to the Registry.

Object statuses define its state, and whether or not certain operations with this objects may be performed.

For example:

The object has a serverUpdateProhibited status, prohibiting changes of any object attributes. If Registrar sends <update> request and attempts to change any attribute, in response to such a request Registration System will send an error notification.

For

example:

If object has a clientDeleteProhibited status, but Registrar needs to delete this object, Registrar will first be required to send to Registry EPP request <update>, whereby this status will be removed, and only then the request for removal of <delete> object will be accomplished.

7. Registrar Object

Registrar object contains information about Registrar that has access to the Registration System. The object is created by the Registry Operator of the corresponding domain, while the access is granted to such Registry in the Registration System.

Registrar's identifier assigned by the Registry Operator is used as an object identifier. This identifier is used by the database to identify Registrar that manages other Registry objects.

8. Domain Object

Identifier of Domain type object is the domain name chosen by Registrar when submitting a registration request. Requirements to the domain name are subject to the Registration Terms and Conditions in a particular TLD which are specified in the Technical Policy of the REGISTRY_NAME Registry.

Registrar's request for registration of a Domain object will not be satisfied and return an error if the Registry already has a Domain object with the same identifier (domain names are unique within each Registry).

8.1. Domain Object Life Cycle

Domain object life cycle includes the following main periods:

- Registration Period;
- Redemption Grace Period;
- Pending Delete Period;

Main periods of the domain life cycle are given in Fig. 2:

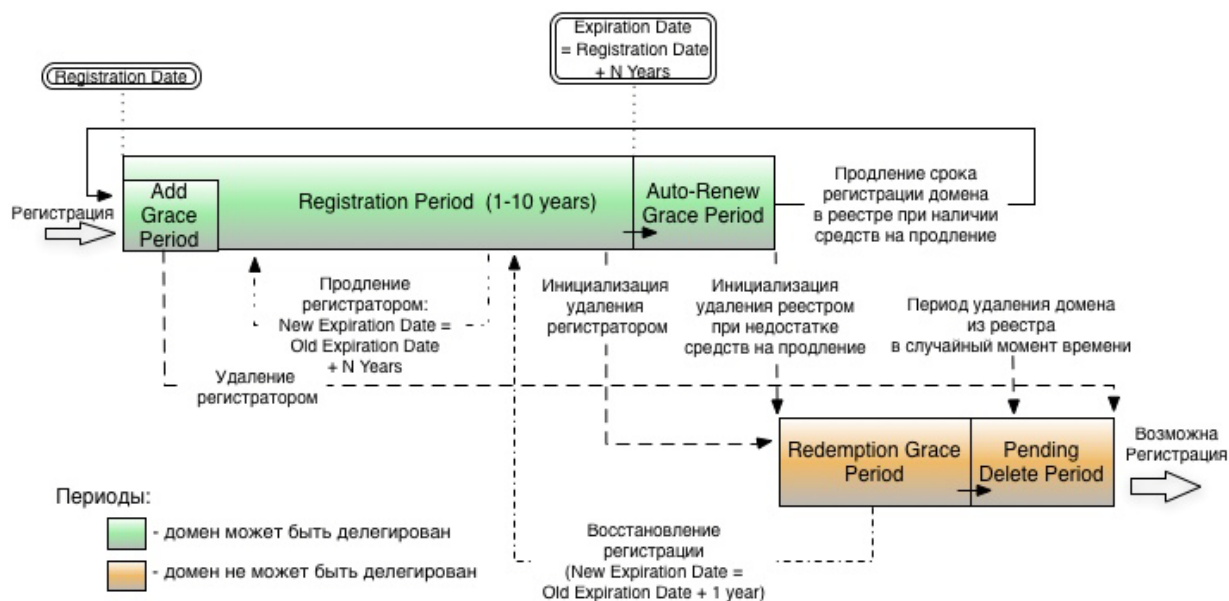


Fig. 3

Main periods of the Domain object life cycle may be combined with a set of additional periods:

- Add Grace Period Period;
- Auto-Renew Grace Period;
- Renew Grace Period;
- Transfer Grace Period;
- Pending Restore Period;
- Pending Transfer Period.

Each period of the domain life cycle is characterized by a set of statuses, which determine Registrar's requests that may be accomplished by the Registration System.

For example:

For the Registration Period Domain object **may** have EPP statuses: *ok*, or *inactive*, or *clientHold*, *clientRenewProhibited*, *clientTransferProhibited*, *clientUpdateProhibited*.

During the Redemption Grace and Pending Delete Periods Domain object **will** have the following EPP statuses: *serverHold*, *pendingDelete*, *serverRenewProhibited*, *serverTransferProhibited*, *serverUpdateProhibited*.

8.1.1. Availability and absence of Domain object life cycle

Subject to the [Domain Registration Policy](#) for each Registry, the availability and duration of each life cycle period is determined in the [Technical Policy of the REGISTRY_NAME Registry](#).

If any life cycle period is not envisaged by the [Domain Registration Policy](#), its duration is equal to zero, and the domain will go to the next life cycle period.

For

example:

If, subject to the Registration Policy for any Registry, Add Grace, Auto-Renew, Pending Delete Periods are unavailable.

Then:

- *unpaid domain cannot be deleted immediately upon registration, whereas Add Grace Period is unavailable;*
- *upon completion of the registration period, the domain will be immediately deleted, whereas registration term accompanied by Auto-Renew Period will not be automatically renewed, and the domain deletion will not be random, that is regulated by the Pending Delete Period.*

8.1.2. Main Registration Period

Following domain registration (creation of Domain object type in the Registry), Registration Period will commence. Duration of the domain name registration period may not exceed 10 (ten) calendar years.

Domain name expiration date is stored in the Expiration date attribute. The date format shall be as follows: DD.MM.YYYY hh:mm:ss, UTC. Domain name expiration date will be changed after domain renewal, automatic domain renewal, domain transfer with renewal and redemption with automatic renewal, as well as after cancellation of renewal which accompanies domain name deletion within Auto-Renew Grace Period and Renew Grace Period. Domain name expiration date is changed by modifying YYYY parameter in Expiration date of the Domain object.

Following registration, all operations with the registered domain become available for the Registrar, except for redemption and those expressly prohibited by the Registry Operator by assigning specified statuses.

Assigning a serverDeleteProhibited server status to the domain may cause extension of registration period. In this case, registration period will expire immediately after canceling serverDeleteProhibited status (provided registration period has already expired by this moment). Assigning a ClientDeleteProhibited status enables server procedure continuity for initiation of domain deletion upon completion of Auto-Renew Grace Period.

8.1.3. Main Redemption Grace Period

When domain deletion from the Registry is initiated by Registrar's EPP command <delete> or by server procedure upon expiry of Auto-Renew Grace Period, domain delegation will be terminated and Redemption Grace Period (RGP) will start for the domain name.

RGP will be terminated ahead of time upon domain redemption.

During RGP the Registrar may use only domain redemption.

8.1.4. Pending Delete Period

RGP period is followed by Pending Delete Period. During this period, the domain has a Pending Delete status. At any moment during Pending Delete Period the domain may be deleted from the Registry by a server procedure.

During Pending Delete Period any operations with a domain name are unavailable for Registrar.

8.1.5. Add Grace Period

Registration is followed by a period during which Registrar may delete a domain name from the Registry without paying the registration fee. In this case, as a result of Registrar's request <domain:delete> domain name will be immediately removed from the Registry, skipping Redemption Grace, Pending Delete, and Delete periods. Period duration is available in the [Technical Policy of the REGISTRY_NAME Registry](#).

8.1.6. Auto-Renew Grace Period

Upon completion of the domain registration period, a server procedure for automatic domain renewal for 1 (one) calendar year will be implemented, and a new registration period will begin.

Auto-Renew Grace Period (ARGP) will start simultaneously. Period duration is available in the [Technical Policy of the REGISTRY_NAME Registry](#). Upon completion of the period, funds for domain renewal period for 1 (one) calendar year will be withdrawn from the Registrar's personal account.

ARGP will be completed ahead of time:

- when Registrar renews the domain name. In this case, funds for domain renewal period for 1 (one) calendar year will be withdrawn from the Registrar's personal account at the moment of execution of <domain:renew> request.
- by Registrar's deletion of a domain name by request <domain:delete>. In this case, no funds will be withdrawn from the Registrar's personal account for service renewal, and registration period which has been

extended upon ARGP start will be reduced by 1 (one) calendar year, and the domain will go to the next life cycle period.

- During outbound domain transfer, ARGP will be completed at the time of transfer completion and the funds will be withdrawn from the Registrar's personal account.

If Registrar has insufficient balance on its personal account to cover domain renewal service for 1 (one) calendar year, domain deletion procedure will be initiated by Registry procedures with transfer to Redemption Grace Period (or subsequent period according to the life cycle for this Registry).

8.1.7. Renew Grace Period

Renew Grace Period starts after the domain is renewed by Registrar with the use of EPP command <domain:renew>. Period duration is available in the [Technical Policy of the REGISTRY_NAME Registry](#). Upon completion of the period, funds for domain renewal period for N years (N registration period calculated in years) will be withdrawn from the Registrar's personal account.

RenewGP period will be completed ahead of time:

- If Registrar deletes domain by request <domain:delete>. In this case, registration term of a domain name will be reduced by N years (the number of years of the previous extension a result of <domain:renew> request), no funds will be withdrawn for payment of a domain renewal service for N years from the Registrar's personal account;
- if Registrar extended domain registration period by a new request <domain:renew>. In this case, funds will be withdrawn from the Registrar's personal account for domain renewal service for N years according to the request followed by Renew Grace Period;
- successful procedure of domain name outbound transfer: In this case, funds will be withdrawn from the Registrar's personal account for domain renewal service for N years following the request from which Renew Grace Period started;

8.1.8. Transfer Grace Period

Transfer Grace Period (TGP) begins after successful completion of domain transfer procedure.

The duration of the period is determined in accordance with the [Technical Policy of the REGISTRY_NAME Registry](#). Upon the completion of the period, funds for domain renewal service for N years (where N is renewal period calculated in years which may be indicated in transfer request; 1 (one) calendar year by default) will be withdrawn from the Registrar's personal account.

TGP period will be completed ahead of time:

- If Registrar deletes domain by <domain:delete> request. In this case, registration term of a domain name will be reduced by N years shorer (which was earlier extended by such time span as a result of <domain:renew> request), no funds will be withdrawn from the Registrar's personal account for payment of a domain renewal service for N years;
- by renewing domain registration period by request <domain:renew>.

8.1.9. Pending Transfer Period

Pending Transfer Period starts after Registry receives a request to transfer a domain to another Registrar.

Duration of the Pending Transfer Period is determined in accordance with the [Technical Policy of the REGISTRY_NAME Registry](#). Pending Transfer Period will be terminated ahead of time upon transfer or failure to transfer a domain to another Registrar.

If a transfer request has been received with less than Pending Transfer Period time span left before the expiry of the domain name registration, the next period of domain life cycle will start upon completion of the Pending Transfer Period.

For example:

Duration of Pending Transfer Period is 5 (five) days, and a transfer request has been obtained 1 (one) day before the completion of Registration Period. 3 (three) days after Registration System receives a transfer request a Losing Registrar submitted to the Registration System a request to reject a domain transfer and a domain transfer operation will end in failure. In this case Auto-Renew Grace Period, if any, will start in 3 (three) calendar days from completion of a domain registration period.

Within Pending Transfer Period renewal, deletion, domain attribute change operations will be unavailable for a Losing Registrar.

8.1.10. Pending Restore Period

Pending Restore Period starts upon a receipt of the EPP command <update restore_request> from Registrar.

Duration of the Pending Restore Period is available in the [Technical Policy of the REGISTRY_NAME Registry](#).

Pending Restore Period will be terminated upon receipt of the EPP command <update restore_report> from Registrar to complete domain restore operation.

If <update restore_request> request has been submitted to the Registration System before the Redemption Grace Period by less than the duration of the Pending Restore Period, the next life cycle of a domain name will start upon completion of the Pending Restore Period.

For

example:

Pending Restore Period lasts 5 (five) days. Domain restore request <update restore_request> was received from the Registrar 1 (one) calendar day prior to the completion of Redemption Grace Period. If <update restore_report> request is not submitted to the Registration System before the completion of Pending Restore Period, Pending Delete Period will start in 5 (five) days.

During Pending Restore Period any domain-related operations are unavailable for the Registrar, except for sending EPP command <update restore_report> containing description of the reason for domain restore.

8.2. Operations With Domain Objects

8.2.1. Domain registration

Domain registration is carried out in the Registry (Domain type object Registry). Registration term starts from the moment of object creation in the relevant Registry.

To create Domain type object (domain registration), applicable Registries shall meet the [Registry Policy](#) and the requirements of the [Technical Policy of the REGISTRY_NAME Registry](#), which regulate the allowed character set in a domain name, minimum amount of characters in a name, etc.

Before domain registration Registrar shall create a unique access code (AuthInfo code) which can be communicated to the Registrant for further transfer. AuthInfo code shall be submitted to the Registration System as part of the request for domain registration.

For domain registration Registry shall create a Registrant Contact object indicated during domain registration.

Domain shall have one mandatory link to Registrant Contact object and may have several links to Admin, Tech, Billing Contact objects.

Domain may be registered for a period of one (1) year to ten (10) calendar years inclusive, subject to the registration term specified in the request.

Registration process is as follows:

- Registrar shall check if the domain is registered in the Registry using the <domain check> request;
- if the domain is already registered, the Registrant may not register the domain.

- if the domain is not registered in the Registry, domain registration will be based on <domain:create> request.

8.2.2. Receiving domain information

Registrar may get information about attribute values of the sponsored domain using <domain info> command. Any Registrar may get such information by entering AuthInfo code in <domain:info> request.

8.2.3. Updating domain attributes

During the registration period, Registrar may change the Domain object attributes, if such operation is not prohibited by serverUpdateProhibited or clientUpdateProhibited statuses.

The following attributes are available for updating: client statuses (statuses with client prefix), links to Contact objects, links to Host objects and DNSSEC parameters, AuthInfo code, domain extensions, including DNSSEC. Update is performed via <domain update> request.

8.2.4. Domain delegation

Domain name delegation is exercised by the Registry automatically by creating a top-level domain zone file and its placement on DNS servers. Domain name may be delegated during registration period and at Registrar's discretion, within ARGP.

The domain will be delegated, if the following conditions are met:

- the domain name has been registered in the Registry;
- the domain name is linked to two or more DNS servers (Domain object is related to two or more Host objects);
- if the indicated DNS server is subordinate to the registered domain name, IP addresses should be specified for such DNS server in the Host object;
- statuses prohibiting domain name delegation (serverHold and clientHold) should not be enabled for the domain name.

8.2.5. Domain deletion

Domain name deletion (canceling registration) in the Registry. Domain deletion shall follow deletion of all Host objects subordinate to this domain, or their rename by <host:update> request, which enables to change Host object identifier to non-subordinate one (in relation to the deleted domain name).

The domain name deletion process is initiated after:

- receiving Registrar's EPP request <domain delete>;
- the server procedure has automatically renewed the domain name, if Registrar has insufficient balance on its personal account to cover domain renewal service for a period of 1 (one) calendar year. Additionally, all Host objects, which are subordinate to the domain name, will be renamed and they will be assigned names in lame-delegation.flexireg.net.

Registrar can initiate the domain name deletion during Registration Period and Auto-Renew Grace Period provided, however, that the domain name is not in the process of outbound transfer (Pending Transfer Period).

Initiation of the domain name deletion can be canceled by Registrar during Redemption Grace Period by a sequence of EPP requests <update restore_request> and <update restore_report> for domain name redemption.

After deletion initiation, the domain has pendingDelete status and Redemption Grace Period will begin, if such period is unavailable for this Registry.

The enabled serverDeleteProhibited or clientDeleteProhibited statuses prohibit to run a deletion initiation request. If clientDeleteProhibited status has been set, to initiate domain name deletion procedure, Registrar should preliminarily disable this status by <domain:update> request.

Domain is deleted from the Registry by a server procedure within a Pending Delete Period, if such period is envisaged for this Registry, or upon completion of the previous period, if Pending Delete Period is unavailable.

8.2.6. Domain renewal

Domain name can be renewed:

- by Registrar within Registration Period and Auto-Renew Grace Period by EPP request <domain:renew>;
- from 1 (one) to 10 (ten) calendar years inclusive subject to renewal term specified in the request, whereby the total registration period may not exceed ten (10) years;
- by automatic renewal procedure of domain registration term for 1 (one) calendar year, when Auto-Renew Grace Period begins;
- if Registrar has a sufficient balance on its personal account to cover this service;
- for 1 (one) calendar year with automatic renewal service simultaneously with domain name redemption from Redemption Grace Period, provided redemption was successful, whereby the total registration period may not exceed ten (10) calendar years.

serverRenewProhibited or clientRenewProhibited statuses prohibit execution of domain name renewal requests by Registrar and domain name registration term automatic renewal procedure. If clientRenewProhibited status has been set, for domain name renewal Registrar should preliminarily disable this status by <domain:update> request.

8.2.7. Domain name outbound transfer

The domain name outbound transfer is initiated by Gaining Registrar's request <transfer request> with AuthInfo code.

In this case the following occurs in the Registry:

- PendingTransfer status is set for the domain name and Pending Transfer period begins;
- operations on initiating domain name deletion, transfer, renewal, and attribute change are prohibited;
- Losing Registrar will initiate notice about transfer request.

During Pending Transfer period:

- Losing Registrar may submit a request to confirm acceptance of the domain name by Gaining Registrar, while Pending Transfer period is discontinued immediately and the domain name will be transferred to Gaining Registrar;
- Losing Registrar may submit a request with refusal to transfer the domain name, while Pending Transfer period is discontinued immediately and the domain name remains under control of Losing Registrar;
- Gaining Registrar may submit a request which stops execution of the domain name outbound transfer to Gaining Registrar, while Pending Transfer period is discontinued immediately and the domain name remains under control of Losing Registrar.

If during Pending Transfer period neither Losing, nor Gaining Registrar submitted any request to Registration System, the domain name will be transferred to Gaining Registrar upon completion of the period.

For the delivery of outbound transfer service, the registration period may be extended for a term indicated in <domain:period> extension parameter provided that the domain name registration term does not exceed 10 years.

In this case, the funds will be withdrawn from Registrar's personal account for delivery of outbound transfer service with domain renewal for the period indicated by Registrar in <domain:period>.

The possible values of <domain:period> parameter are given in the [Technical Policy of the REGISTRY_NAME Registry](#).

If domain transfer is executed without domain renewal (registration period is limited by 10 (ten) calendar years), outbound transfer service will be deemed delivered, while the funds for the service delivery will be withdrawn from the Registrar's personal account regardless of whether the domain registration period has been extended.

serverTransferProhibited or clientTransferProhibited statuses prohibit execution of the outbound transfer request. If clientDeleteProhibited status has been set, Gaining Registrar for transfer initiation should preliminarily disable this status by <domain:update> request.

Together with outbound transfer Gaining Registrar will accept Host type objects which are subordinate with respect to the domain name being transferred.

8.2.8. Domain name registration redemption from Redemption Grace Period

Registrar may cancel initiation of the domain name deletion process and redeem the domain name registration during Redemption Grace Period (RGP).

Domain name redemption is initiated by <update restore_request>. In this case the domain name acquires "pendingRestore" status and Pending Restore period will begin.

During Pending Restore Period Registrar may send <update restore_report> request containing information about the reasons for domain name redemption. In this case:

- Pending Restore Period discontinues and pendingRestore status is disabled;
- domain redemption procedure will begin in the Registry;
- if registration expiry moment is less than domain recovery period, the domain will go to Auto-Renew Grace Period of the domain life cycle. If Auto-Renew Grace Period is unavailable in the life cycle diagram of this Registry, the renewal algorithm is given separately in the [Technical Policy of the REGISTRY_NAME Registry](#).

The domain name registration redemption service may be provided only if the balance on Registrar's personal account is sufficient to cover the service.

If no <update restore_report> request has been submitted by Registrar during Pending Restore period, then upon its expiry the domain name registration redemption operation is no longer available.

9. Contact object

The object identifier is assigned by Registrar when a request for Contact type object registration in Registry is created. The identifier shall consist of a sequence of ASCII case-insensitive symbols with 3 - 16 character length.

Registrar's request to Registry for registration of a Contact object will not be satisfied and will return an error, if Registry already has a Contact object with such identifier.

9.1. Contact object life cycle

Contact object (contact) has only Registration Period which is open-ended. Contact object registration period expires when this object has been deleted by Registrar using <contact:delete> request which may have a positive result only if this Contact object is not specified as a contact for any domain name of Registry supported by flexireg Registration System.

9.2. Contact registration, change, transfer and deletion

Contact type object registration is executed by <contact:create> request. If EPP extension for Contact object is required for registration, the said requirement is outlined in the [Technical Policy of the REGISTRY_NAME Registry](#).

Contact object attributes are changed by <contact:update> request.

During outbound transfer of a domain name with the Contact object, this Contact object is not transferred to Gaining Registrar.

Outbound transfer of Contact object is possible at the initiative of Gaining Registrar through a standard request for Contact object transfer with indication of AuthInfo code.

9.3. Contact object EPP extension

To store additional information about Registrant and other domain contacts, Contact object extension outlined in the [Description of EPP Extensions](#) may be used.

10. Host object

10.1. Host object life cycle

Only one period is available for Host object – open-ended Registration Period.

Registration period of Host object expires when this object is deleted by the Registrar it is sponsored by through <host:delete> request which may be positive, if this Host object is not indicated in any domain names registered by Registries of flexireg Registration System during this domain delegation.

10.2. Registration, update and deletion of Host object

- Host object is registered by <host:create> request;
- Host object is changed by <host:update> request, which makes changing the Host object identifier possible (actually change name of DNS server);
- Host object may be deleted from Registry by Registrar's request <host:delete> provided such Host object is not indicated for delegation of any domain in Domain object.

10.3. Outbound transfer of Host object

- Outbound transfer of internal class Host object will take place along with Domain object transfer with respect to which it is subordinate.
- Outbound transfer of external class Host object together with Domain object will not take place.

According to ICANN recommendations for prevention of Orphan Glue Records domain deletion shall be preceded by deletion of Host objects which are subordinate with respect to a domain name to be deleted.

11. Messages and notifications

According to EPP protocol, the following types of messages are automatically sent to Registrar:

- During domain name outbound transfer:
 - initiation (to Losing Registrar);
 - rejection (to Gaining Registrar);
 - cancellation (to Losing Registrar);
 - successful completion of transfer (to Gaining Registrar);
 - during automatic approval of domain transfer upon completion of Pending Transfer Period (to Gaining Registrar and Losing Registrar).
- In case of automatic renewal:
 - successful automatic renewal;
 - automatic renewal failed due to insufficient balance on the personal account (upon expiry of the registration period);
 - automatic renewal failed due to enabled serverRenewProhibited or clientRenewProhibited statuses (upon expiry of the registration period).
- In case of automatic transfer of a non-renewed domain name in RGP.
- In case of failure to restore a domain name upon completion of Pending Restore Period.
- During enabling or disabling any server status.

12. Technical Support for Registrars

7/24 technical support is available for Registrars.

Registrar may address their technical questions to: registrar.support@faitid.org. When composing technical questions through EPP it is recommended, and in some case it is a matter of necessity, to attach to the questions the fragments of EPP protocol (the queries addressed to and answers obtained from the Registration System). It will at least make it possible to reduce the time of processing Registrar's query.

Registrars may submit administrative and financial questions via e-mail to: accreditation@faitid.org.

Registrars may also address their questions by phone: +7 (495) 789-82-07, but in cases requiring technical investigations or modeling Registration System behavior, this communication option is not recommended.

13. Maintenance outages

Registry Holder is entitled to suspend operation of specific parts of Registration System. This may be related both to maintenance of the available hardware and due to putting new hardware and/or Registration System components into operation. Similar operations are performed in a manner ensuring that the entire Registration System and other associated services remain functional.

During similar operations appropriate notices about work start time, duration and end time will be sent in advance to Registrar's contact e-mail specified in the Service Agreement with Registry Operator.

In case of unforeseen failures in Registration System, Registrars will be sent with a notice (to Registrar's contact e-mail specified in the Services Agreement with Registry Operator) as soon as practicable, where the problem and planned outage period are specified.

14. Registrar's personal account

Registrar shall independently check the availability of funds required for payment of services delivered by Registry Operator in its personal account and maintain a positive balance of such account. The information about Registrar's balance through Registrar's personal account is available in Registrar's web interface.

15. Feedback

If you have any questions on this document, please contact us at: accreditation@faitid.org.