Management of operations on domain names of the ccTLD .it

Technical Guidelines

Version **2.4**

August 1, 2018

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1   Revisions

Versions later than 2.0 will be considered as revisions to this document.

Changes from version 2.3 of June 8, 2018:

- revision of the following sections for the introduction of the DNSSEC:
  - "2.3.1 Domain name statuses";
  - "3.1.2.1 Fields of the domain object required";
  - "3.1.2.6 Checking the functionality of the nameservers";
  - "3.2.2 Simple change of a registered domain name";
  - "3.4.10 Effects of a Transfer Domain";
  - "3.5.4 Effects of Trade-Domain Transfer";
  - "4.2.2 Info Domain";
  - "7.1.1 Examples of *login* requests from a "non DNSSEC accredited" Registrar";
  - "7.1.3 Examples of responses to a *login* request from a "non DNSSEC accredited" Registrar";

- Section "5 DNSSEC in the ccTLD .it": added;

- revision of the table included in Section "6.7.2 Messages concerning the domain names of a Registrar" for the introduction of the DNSSEC;

- revision of the table included in Section "6.11 Other useful parameters" for the introduction of the DNSSEC;

- new sections added for the introduction of the DNSSEC:
  - "7.1.2 Example of *login* request from a "DNSSEC accredited" Registrar";
  - "7.1.4 Example of response to a *login* request from a "DNSSEC accredited" Registrar";

- revision of the following reasons for error ("Appendix D - Reasons for errors") for the introduction of the DNSSEC:
  - 4012 (=Extension URI missing);
  - 9041 (=Update domain combination of status, name server and registrant is not allowed);

- new reasons for errors ("Appendix D - Reasons for errors") added for the introduction of the DNSSEC:
  - 5005 (=Message refers to a namespace URI missing in Login request);
  - 10001 (=DNSSEC: registrar is not DNSSEC accredited);
  - 10002 (=DNSSEC: unsupported maxSigLife element);
  - 10003 (=DNSSEC: unsupported keyData element);
  - 10004 (=DNSSEC: unsupported urgent attribute);
  - 10005 (=DNSSEC: no dsData to remove or add);
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  - 10007 (=DNSSEC: invalid digestType value);
  - 10008 (=DNSSEC: invalid alg value);
  - 10009 (=DNSSEC: invalid digest value);
  - 10010 (=DNSSEC: duplicate dsData);
  - 10011 (=DNSSEC: dsData to add is already associated with the domain);
  - 10012 (=DNSSEC: dsData to remove is not associated with the domain);

- revision of paragraphs 16.2 and 16.3 of "Appendix M - The WHOIS service" for the introduction of the DNSSEC;

- revision of the "Glossary".

Changes from version 2.2 of May 2, 2017:

- revision of the following paragraphs in compliance with the "European Data Protection Regulation", n. 2016/679 of the European Parliament and of the Council, of April 27, 2016, concerning the protection of natural persons with regard to the processing of personal data, as well as the free circulation of such data:
  o "3.1.4.1 Form for registering a reserved domain name";
  o "3.1.6.1 Registration Form";
  o "3.6.1.1 Online request form to be filled in by the Registrar transferor";
  o "3.6.2.1 Online request form to be filled in by the Registrar transferee";
  o "3.6.3 Verification and acceptance, Registrar transferee side, of the domain names involved in Bulk Transfer";
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  o "3.8.2.1.1 Request form for verification of subjective requirements by a natural person";
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  o "3.10.1 Form for the registration of a domain name following a challenge and/or reassignment procedure: a natural person";
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  o "3.13.1 Form for request for change in Registrant data by natural persons";
  o "3.13.2 Form for request for change in Registrant data by entities other than natural persons";
  o "16.3 Option: ConsentForPublishing = 0 (false)" (Appendix M - The WHOIS service);
- revision of the "Glossary";

Changes from version 2.1 of November 3, 2014:

- revision of Section "3.1.1.2 Validation steps for Contact registration" for the introduction of the validity check of the international code indicated in the telephone and fax numbers;

- revision of Sections "3.1.2.2 Validation steps for the registration of a domain name", "3.3.1 Validation steps for the change of Registrant" and "3.4.1 Validation steps for the modification of the Registrar" to check that the Registrar that sends a request of registration of a new domain name, change of Registrant, change of Registrar and change of Registrar with the simultaneous change in the Registrant, is not suspended;

- revision of Section "3.2 Simple change" for the simple change of a domain name from a suspended Registrar;

- revision of Section "3.7.4 Restoring a deleted domain name" for the recovery of a deleted domain name from a suspended Registrar;

- revision of the tables included in the following paragraphs for the elimination of the minimum credit threshold required to maintain their own domain names:
  o "6.6 Time Periods";
  o "6.7.1 Messages concerning the Registrar";
  o "6.7.3 Correspondence between messages and XML Schema";

- revision of the table included in Section "6.6 Time Periods" for the reduction of the number of days (from 21 to 4) taken into account by the system to calculate the minimum credit threshold required to maintain their own domain names;

- two reasons for errors deleted (Appendix D - Reasons for errors): 5054 (=Low credit: only auto renew and unbillable commands will be processed) e 5056 (=Credit is going below threshold limit due to the operation cost);

- two reasons for errors added (Appendix D - Reasons for errors): 5058 (=The Registrar is suspended) and 8070 (=Postal information: invalid org value).

Changes from version 2.0 of June 24, 2013:

- revision of the following paragraphs for the reduction, from 3 to 1 calendar days, of the maximum period of stay of a domain name in pendingTransfer status:
  o "2.3.1 Domain name statuses";
  o "3.4 Change of Registrar";
  o "3.4.3 Example of a response to a request for Transfer Domain with op = request";
  o "3.4.5 Example of a response to a request for Transfer Domain with op = cancel";
  o "3.4.7 Example of a response to a request for Transfer Domain with op = approve";
  o "3.4.9 Example of a response to a request for Transfer Domain with op = reject";
  o "3.4.10 Effects of a Transfer Domain";
  o "3.5.3 Examples of responses to a request for Transfer-Trade Domain" - example 1;
  o "4.2.3.2 Examples of responses to a Domain Transfer Query request" - examples 3, 4, 5 and 6;
  o "4.3.2 Examples of responses to a Poll Req request" - examples 7, 8, 9, 10 and 11;
  o "6.6 Time Periods";
  o "6.7.2 Messages concerning the domain names of a Registrar";

- revision of the following paragraphs for the extension of IDNs in the 24 official languages of the European Union:
  o "2.2 Characters accepted during the process of registration of a .it domain name", "2.2.1 Homogliphs", "2.2.2 *Remapped* characters", "Appendix E - Latin-1 Supplement Charset", "Appendix F - Latin Extended-A Charset", "Appendix G - Latin Extended-B Charset", "Appendix H - Greek Charset", "Appendix I - Greek Extended Charset", "Appendix L - Cyrillic Charset" (new sections);
  o "3.1.1.1 Contact object fields required";
  o "3.1.2.1 Fields of the domain object required";
  o "3.1.2.2 Validation steps for the registration of a domain name";
  o "3.1.2.4 Examples of responses to a Create Domain request" (example 1 modified and example 3 added);
  o "3.1.4 Request to register a reserved domain name";
  o "3.1.4.1 Form for registering a reserved domain name", "3.10.1 Form for the registration of a domain name following a challenge and/or reassignment procedure: a natural person" e "3.10.2 Form for the registration of a domain name following a challenge and/or reassignment: subject other than a natural person" (notes included in the form modified);
  o "3.1.4.3 Tests for congruence of the data in the Registry Database";
  o "3.1.4.4 Conclusion of the operation";
  o "3.2.1.1 Validation steps for the simple change of a registered contact";
  o "3.10 Change to toBeReassigned status";
  o "3.10.4 Tests for congruence of the data in the request";
  o "4.3.2 Examples of responses to a Poll Req request" (example 12 added);
  o "6.7.2 Messages concerning the domain names of a Registrar";
  o "6.7.3 Correspondence between messages and XML Schema";

- revision of Section "6.7.1 Messages concerning the Registrar": e-mail forwarding to the Registrar billing contacts following the procedure of credit treshold calculation;

- revision of the paragraphs below following the elimination of the 30 day-time constraint related to the cancellation of a domain name in inactive/*dnsHold* status in the event that the authoritative nameservers of the domain name are not correctly configured within the 30 days following its registration. Moreover, the constraints related to the impossibility of

carrying out a Change of Registrar and a Change of Registrant operations during this period of time are also eliminated:
- o "2.3.1 Domain name statuses";
- o "3.1.2.5 Effects of the Create Domain request";
- o "3.2.2 Simple change of a registered domain name";
- o "3.2.2.1 Validation steps for the simple change of a registered domain name";
- o "3.3.1 Validation steps for the change of Registrant";
- o "3.4.1 Validation steps for the modification of the Registrar";
- o "3.4.10 Effects of a Transfer Domain";
- o "3.5.4 Effects of Trade-Domain Transfer";
- o "3.6.2 Verification, Registrar transferor side, of domain names involved in *Bulk Transfer*";
- o "3.6.3 Verification and acceptance, Registrar transferee side, of the domain names involved in Bulk Transfer";
- o "3.7.3.1 Validation steps for the deletion of a domain name";
- o "3.7.3.4 Effects of Delete Domain";
- o "3.7.4.1 Validation steps for the restoration of a domain name";
- o "3.7.4.4 Effects of Update Domain with ext = restore";
- o "3.10.5 Conclusion of the operation";
- o "3.12.1 Change to noRegistrar status";
- o "3.12.2 Change to notRenewed status";
- o "6.6 Time Periods";
- o "6.7.2 Messages concerning the domain names of a Registrar";
- o "6.7.3 Correspondence between messages and XML Schema";

- revision of Section "3.1.2.6 Checking the functionality of the nameservers": the list of the DNS validator checks has been updated with the missing tests and new information relating to the activation of periodic DNS validation checks for domain names in inactive/dnsHold and pendingUpdate status have been added;

- revision of Section "4.2.2 Info Domain": the extensions that may be present in the server response of an Info Domain command have been added;

- revision of Section "4.2.2.1 Examples of an Info Domain request without extension "infContacts"": example 4 modified;

- revision of the table included in Section "6.11 Other useful parameters": the EPP session timeout has been reduced from 30 to 5 minutes;

- a new appendix ("Appendix M - The WHOIS service") have been added;

- revision of the "Glossary".

2   Registration system of the Italian Registry

2.1   Introduction

These "Guidelines for managing operations on domain names in the ccTLD .it" (hereafter "Technical Guidelines") detail the operations needed for registering and maintaining .it domain names and are an integral part of the "Rules for assigning and managing domain names in the ccTLD .it" (hereafter "Rules").

The system for registering and maintaining a domain name of the ccTLD .it is provided by organizations (henceforth Registrars) that have an active contract with the Registry (henceforth ".it Registry" or "Registry of the ccTLD .it"), which is subordinate to an accreditation procedure. The Registrar will always be an intermediary with the Registry for all domain name registering and maintenance and also for correctly updating the Database of Assigned Names (DBNA).

The registration system of the .it Registry allows Registrars to register and maintain domain names in realtime.

The system uses the EPP (Extensible Provisioning Protocol) protocol to comply with internationally accepted standards.

The EPP is a synchronous client-server protocol based on XML. In the implementation of the .it Registry it provides secure connections for the management of the objects related to the registration and maintenance of domain names, namely:

- "domain" objects containing information about the Registrant (i.e. the assignee of the domain name), on technical and administrative contacts, and the authoritative nameservers associated with the domain name itself;

- "contact" objects with general information on the contacts referenced in "domain" objects i.e. the Registrant, the technical and administrative contacts.

The implementation of the various procedures complies as closely as possible with the EPP standard as shown in the RFC[1]. The EPP allows extensions to the protocol to be defined so as to try to meet special needs, but these extensions only have a local significance and, with a few exceptions, the main ccTLDs and gTLDs that now implement synchronous systems have sought to limit them to the maximum and to adopt the universally recognized and accepted standard.

There are three categories of EPP commands that the Registrar (the client) may submit to the Registry (the server):

- commands for managing the session (login, logout, hello);

- commands for querying the server to obtain information on domain names and registered contacts as well as the presence of messages in the Registrar's polling queue (i.e. the queue of messages that the Registrar receives from the Registry);

- commands for registering and maintaining domain names and contacts associated with them.

The commands listed above should be submitted to the "epp.nic.it" Registry server except for the registration of domain names that have been cancelled for less than 7 (seven) days. In this case the request must be sent to the "epp-deleted.nic.it" server (see Section 3.1.3). In addition, the

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[1] RFC 5730 - Extensible Provisioning Protocol (EPP)
RFC 5731 - Extensible Provisioning Protocol Domain Name Mapping
RFC 5732 - Extensible Provisioning Protocol Host Mapping
RFC 5733 - Extensible Provisioning Protocol Contact Mapping
RFC 3375 - Generic Registry-Registrar Protocol Requirements
RFC 3735 - Guidelines for Extending the Extensible Provisioning Protocol
RFC 3915 - Domain Registry Grace Period Mapping for the Extensible Provisioning Protocol

Registrar may send commands to that server to obtain information on domain names (see Section 4.2 to register a new contact (see Section 3.1.1), or to update the information associated with a registered contact (see Section 3.2.1).

A maximum of 5 static IP addresses are allowed access to the above-mentioned servers. The maximum number of sessions that can be open at the same time is 5, irrespectively of the number of clients used. The table in Section 6.11 shows the maximum number of commands to verify whether a particular domain name is registered in the Database of the Registry that a Registrar can send in one day to the "epp.nic.it" and "epp-deleted.nic.it" servers. This table also indicates the maximum number of daily requests for the registration of domain names that have been cancelled within less than 7 (seven) days that Registrars can send to the "epp-deleted.nic.it" server.

More technical information on the EPP protocol and commands for managing the session and for querying the server are contained in the Appendices attached to these "Technical Guidelines".

The commands for registering and maintaining domain names and contacts associated with them are described in Section 3.

To facilitate the reading of EPP commands sent by the Registrar and reported in the following sections, the required fields are specified in **bold**, while the fields that are extensions to the standard protocol are in *italics*.

Some fields of the various objects are listed according to the EPP standard and any future uses, but were not considered in the current implementation of the system.

2.2 Characters accepted during the process of registration of a .it domain name

The characters accepted during the process of registration of a .it domain name are indicated below:

- ASCII: digits (0-9), letters (a-z) and hyphen (-);

- non-ASCII: all characters belonging to the charset Latin-1 Supplement (see "Appendix E" - Section 10), Latin Extended-A (see "Appendix F" - Section 11), Latin Extended-B (see "Appendix G" - Section 12), Greek (see "Appendix H" - Section 13), Greek Extended (see "Appendix I" - Section 14) and Cyrillic (see "Appendix L" - Section 15).

The non-ASCII characters indicated above enable the registration of the IDNs in the 24 official languages of the European Union.

2.2.1 Homogliphs

In order to avoid any problems associated with the use of homoglyphs/homographs (e.g. the ASCII character "c" and the "c" in Cyrillic, although apparently the same, have different Unicode encoding - U +0063 and U +0441, respectively), the .it Registry does not accept requests for domain names that contain characters belonging to different charset (Latin, Greek, Cyrillic), clearly excluding the suffix ".it" and the domain names belonging to the geographical tree.

For more clarity, below some examples of accepted or not accepted domain names are indicated:

- αβγ.it   accepted (all characters belong to the Greek charset);

- фдῆ̃.it   not accepted (the first two characters belong to the Cyrillic charset while the third belongs to the Greek charset);

- фдf.it   not accepted (the first two characters belong to the Cyrillic charset while the third to the Latin charset));

- ῆ̃βßῆ̃.it   not accepted (the third character belongs to the Latin charset, while the others belong to the Greek charset);

- αβγ.ge.it   accepted (ge.it belongs to the geographical tree);

- αβγ.gε.it   not accepted (gε.it does not belong to the domain names of the geographical tree);

- φдф.viareggio.lu.it   accepted (viareggio.lu.it belongs to the geographical tree).

2.2.2 "*Remapped*" characters

A single non-ASCII character can also represent some combination of characters (ASCII and non-ASCII). For example, in the Greek alphabet, the combination of the characters "ἤ" and "ι" can also be represented by a single character "ᾔ".

In order to avoid any problems arising from this situation, every combination of characters present in a domain name referable to a single character, is replaced by the equivalent single character.

Both, the combination of characters and the single characters with which they are replaced, and the Unicode encodings are indicated in the table below.

Combination of characters	Unicode Encoding combination of characters	*Remapped* character	Unicode Encoding *Remapped* character
ἀι	U+1F00 U+03B9	ᾀ	U+1F80
ἁι	U+1F01 U+03B9	ᾁ	U+1F81
ἂι	U+1F02 U+03B9	ᾂ	U+1F82
ἃι	U+1F03 U+03B9	ᾃ	U+1F83
ἄι	U+1F04 U+03B9	ᾄ	U+1F84
ἅι	U+1F05 U+03B9	ᾅ	U+1F85
ἆι	U+1F06 U+03B9	ᾆ	U+1F86
ἇι	U+1F07 U+03B9	ᾇ	U+1F87
ἠι	U+1F20 U+03B9	ᾐ	U+1F90
ἡι	U+1F21 U+03B9	ᾑ	U+1F91
ἢι	U+1F22 U+03B9	ᾒ	U+1F92
ἣι	U+1F23 U+03B9	ᾓ	U+1F93
ἤι	U+1F24 U+03B9	ᾔ	U+1F94
ἥι	U+1F25 U+03B9	ᾕ	U+1F95
ἦι	U+1F26 U+03B9	ᾖ	U+1F96
ἧι	U+1F27 U+03B9	ᾗ	U+1F97
ὠι	U+1F60 U+03B9	ᾠ	U+1FA0
ὡι	U+1F61 U+03B9	ᾡ	U+1FA1
ὢι	U+1F62 U+03B9	ᾢ	U+1FA2
ὣι	U+1F63 U+03B9	ᾣ	U+1FA3
ὤι	U+1F64 U+03B9	ᾤ	U+1FA4
ὥι	U+1F65 U+03B9	ᾥ	U+1FA5
ὦι	U+1F66 U+03B9	ᾦ	U+1FA6
ὧι	U+1F67 U+03B9	ᾧ	U+1FA7
ὰι	U+1F70 U+03B9	ᾲ	U+1FB2

αι	U+03B1 U+03B9	ᾳ	U+1FB3
άι	U+03AC U+03B9	ᾴ	U+1FB4
ᾶι	U+1FB6 U+03B9	ᾷ	U+1FB7
ὴι	U+1F74 U+03B9	ῂ	U+1FC2
ηι	U+03B7 U+03B9	ῃ	U+1FC3
ήι	U+03AE U+03B9	ῄ	U+1FC4
ῆι	U+1FC6 U+03B9	ῇ	U+1FC7
ὼι	U+1F7C U+03B9	ῲ	U+1FF2
ωι	U+03C9 U+03B9	ῳ	U+1FF3
ώι	U+03CE U+03B9	ῴ	U+1FF4
ῶι	U+1FF6 U+03B9	ῷ	U+1FF7

For example, if you wish to register the domain name ἀιἀιἀιἀι.it, as the combination ἀ (U+1F00) and ι (U+03B9) is replaced by the single equivalent character ᾀ (U+1F180); the domain name that is actually possible to request and register becomes ᾀᾀᾀᾀ.it.

Obviously, the constraint on the minimum length of a domain name is applied after the replacement of the combination of characters (if occurred). Therefore, a registration request for the domain ἀιἀι.it will be rejected by the system, since after the replacement of the *remapped* characters; the domain name becomes ᾀᾀ.it and no longer meets the requirement of a minimum length of 3 characters.

If a Registrar wishes to request the registration of a domain name containing any of the combination of characters indicated above, the server will register the domain name containing the equivalent single character in replacement of the combination of characters. Then the server will notify the Registrar of the successful replacement, both in the response of the Create Domain command and in the polling queue by means of a dedicated message.

For the implementation of this new feature, a new extension called "remappedIdnData" has been defined. This contains the IDN domain name requested by the Registrar and the one actually recorded as a result of the transformation. This extension is defined in the schema file extdom-2.0.

2.3   Statuses

A status characterizes the current operational condition of an object and its possible future transitions.

In the ccTLD .it registration system there is a subdivision between the actual statuses of a domain name and the additional constraints that are applicable to the statuses themselves, which may affect the acceptance and processing of commands. In the registration and maintenance system of .it domain names the concept of "multi-status" of a domain name is highlighted and used. This means that, at every moment of the life cycle of a domain name, it cannot be associated with a single status but to a combination of statuses that determine both its current situation and the constraints imposed by the Registrar or the Registry. These constraints impose the operations a domain name can be subject to.

The same considerations also apply to objects of "contact" type and therefore contacts also are subject to state transitions in the ccTLD .it, although much simpler than those foreseen for domain names.

2.3.1   Domain name statuses

Status	Description	DNS
ok	Domain name registered, active and available for any operation.	Delegated
inactive/dnsHold	Domain name registered but inactive and available for any operation. This status is attributed to domain names for which the periodic checks of the DNS configuration, performed by the Registry, is not positive.	Not delegated
pendingUpdate	Domain name for which a change of the authoritative name servers or of the Delegation Signer (DS) records has been requested and pending a positive DNS configuration check. The domain name remains in that status for a maximum of 5 (five) days. If the new DNS configuration is not positively validated by the Registry within this term, it is abandoned. The domain name returns to the previous status.	Delegated
inactive/clientHold	Domain name for which the Registrar has suspended operations and inhibited any transaction, following filing of legal proceedings regarding the use and/or assignment of the domain name. The only operation permitted is: removal of "clientHold" by the Registrar.	Not delegated
inactive/serverHold	Domain name for which the Registry recognizes the need to render the domain name inactive; the data in the DBAN associated with domain name remain unchanged.	Not delegated
pendingDelete/redemptionPeriod	Registered domain name for which the Registrar has asked the deletion on behalf of the Registrant. The only operation permitted is: recovery of the domain name by the Registrar within 30 (thirty) days of the date of transfer to that status.	Not delegated
pendingTransfer	Domain name for which a "Change of Registrar" is in progress. The "old" Registrar may veto the "Change of Registrar" only if a notice regarding the domain name has been duly served by the relevant authorities. The domain name remains in this status for a maximum of 1 (one) day. If the "Change of Registrar" is not explicitly deleted by the new Registrar within this term, it will be automatically approved by	Depends on the statuses with which it is associated

	the Registry.	
pendingTransfer/bulk	Domain name for which a Bulk Transfer operation is underway.	Depends on the statuses with which it is associated
autoRenewPeriod	Identifies the period of 15 (fifteen) days immediately after expiry of the domain name.	Depends on the statuses with which it is associated
clientDeleteProhibited	Constraint imposed by the Registrar to prevent deletion of a domain name. The Registrar may not raise this limit to prevent the Registrant from requesting deletion of a domain name.	Depends on the statuses with which it is associated
clientUpdateProhibited	Constraint imposed by the Registrar to prevent a domain name from being changed. The Registrar may not place this constraint to prevent the Registrant from requesting a change of domain name, unless valid grounds are provided.	Depends on the statuses with which it is associated
clientTransferProhibited	Constraint imposed by the Registrar to prevent the transfer of a domain name to another Registrar. If the Registrar, based on a decision of the administrative, judicial or police authorities, notified in the proper form, or a decision relating to the use and/or assignment of domain names maintained by them, is about to put the domain name into "clientTransferProhibited" or, simultaneously, into "clientDeleteProhibited/ clientUpdateProhibited/ clientTransferProhibited", then said Registrar is required to notify the Registry of the decision in question, together with a copy for verification purposes, however without this preventing the Registrar from arranging for what may be needed. The Registrar may only veto the "Change of Registrar" if a notice, for said domain name, has been duly served by the competent authorities.	Depends on the statuses with which it is associated
clientDeleteProhibited/ **clientUpdateProhibited/** **clientTransferProhibited**	Constraints set by the Registrar to prohibit any transaction to the domain name, following the filing of legal proceedings on the domain name regarding its use and/or assignment. If the Registrar, based on a decision of the administrative, judicial or police authorities, notified in the proper form, or a decision relating to the use and/or	Depends on the statuses with which it is associated

	assignment of domain names maintained by them, is about to put the domain name into "clientTransferProhibited" or, simultaneously, into "clientDeleteProhibited/ clientUpdateProhibited/ clientTransferProhibited", then said Registrar is required to notify the Registry of the decision in question, together with a copy for verification purposes, however without this preventing the Registrar from arranging for what may be needed. The only operation permitted is: removal of the "client" constraints by the Registrar.	
serverDeleteProhibited	Constraint imposed by the Registry to prevent deletion of a domain name.	Depends on the statuses with which it is associated
serverUpdateProhibited	Constraint imposed by the Registry to prevent change of a domain name.	Depends on the statuses with which it is associated
serverTransferProhibited	Constraint imposed by the Registry to prevent the transfer of a domain name to another Registrar.	Depends on the statuses with which it is associated
serverDeleteProhibited/ **serverUpdateProhibited/** **serverTransferProhibited**	Constraints set by the Registry to prohibit any transaction to the domain name.	Depends on the statuses with which it is associated
pendingDelete/pendingDelete	Identifies the period preceding final deletion of the domain name from the Registry's DBAN, which must take place within the Drop Time period, established and publicly notified on the web site of the Registry.	Not delegated
challenged	Domain name contested by a third party, not available for the "Change of Registrant". It identifies all domain names for which a challenge procedure is active.	Depends on the statuses with which it is associated
inactive/revoked	Domain name revoked by the Registry and not immediately available for free assignment.	Not delegated
inactive/toBeReassigned	Domain name for which a reassignment or challenge procedure has been concluded successfully. The domain name can be registered within 30 (thirty) days by the opposing party.	Not delegated

ok/noRegistrar **inactive/dnsHold/noRegistrar**	Domain name for which the Registrar has no active contract with the Registry. The domain name retains this status until the date in the expire field. The only operations permitted are: "Change of Registrar" (together with a "Change of Registrant", if required) by the Registrant and recovery of the domain name by the same Registrar in case it has a new contract with the Registry.	Depends on the statuses with which it is associated
inactive/noRegistrar	Domain name for which the Registrar no longer has an active contract with the Registry or for which a "Change of Registrar" operation gave a negative result beyond the autoRenewPeriod. The domain name has reached the date in the "expire" field and retains this status for 60 (sixty) days. The only operations permitted are: "Change of Registrar" (together with "Change of Registrant", if required) by the Registrant and recovery of the domain name by the same Registrar in case it has a contract with the Registry.	Not delegated
inactive/notRenewed	Domain name that has reached the date in the "expire" field and has not been renewed automatically due to insufficient credit on the part of the Registrar. Domain names in this status are recovered automatically as soon as the Registrar's credit allows. The domain name retains this status for 30 (thirty) days. The only operations permitted are: automatic recovery by the system as soon as the Registrar's credit allows and "Change of Registrar" (together with "Change of Registrant", if required) by the Registrant.	Not delegated
reserved	Non-registered domain name reserved for a particular Registrant.	Not delegated
unassignable	Domain name that cannot be assigned to any registrants.	Not delegated
deleted	Domain name for which a deletion operation has taken place. The domain name is freely available for assignment.	Not delegated

2.3.2   Contact statuses

Status	Description
ok	Contact that has been registered in the DBAN but it has not been referenced by a domain name yet. There are no constraints on the contact.
linked	Contact that has been registered in the DBAN and is referenced by at least one domain name. There are no constraints on the contact apart from the implicit one, which cannot be deleted as it is currently referenced by at least one domain name.
clientDeleteProhibited	Constraint imposed by the Registrar to prevent the deletion of a contact.
clientUpdateProhibited	Constraint imposed by the Registrar to prevent the update of a contact.
serverDeleteProhibited	Constraint imposed by the Registry to prevent the deletion of a contact.
serverUpdateProhibited	Constraint imposed by the Registry to prevent the update of a contact.

3   The transactions allowed on the domain names in the ccTLD .it

There are two categories of transactions allowed on the domain names:

- transactions carried out by the Registrar on its own behalf, on behalf of the Registrant, or at the request of a competent Authority;

- transactions carried out by the Registry or at the request of a competent Authority.

The main transactions provided in the registration system of the .it Registry are as follows:

- registration and maintenance;

- change of the Registrant;

- change of the Registrar (with or without a simultaneous change of the Registrant);

- deletion of a contact or a domain name;

- recovery of a domain name;

- revocation of a domain name (at the request of a competent Authority or by the Registry).

In addition to the above is a "Bulk Transfer", that is the transfer of a considerable number of domain names between two Registrars.

3.1   Registering a new domain name

Requests for registration are made via the EPP protocol by the Registrar for its own account or for the Registrant. The Registrar must obtain the explicit acceptance by the Registrant, of any declaration of assumption of responsibility relating to the registration of the domain name. The procedure by which such approval is acquired by the Registrar (see Section 3.1.6), must be such as to permit transmission to the Registry in writing, if the Registry should so require as described in Section 3.8 .

The assignment of domain names in the ccTLD .it is on a "first come first served" basis.

The date and time of registration of a domain name coincide with the date and time of entry in the DBAN of a request that is syntactically and semantically correct.

To register a new domain name, the Registrar must first register all the contacts referenced in the new domain name (if not yet present in the Registry Database), that is to say the Registrant ("registrant"), the administrative contact ("admin"), and the technician contacts ("tech"). The Registrar can then proceed with the registration of new domain name using the previously registered contacts.

The registrations are made through the use of EPP Create command. Depending on the type of object to register, it is referred to as Create Contact for contacts, or Create Domain for domain names.

The creation of the hosts associated with a domain name, as with changes to them, takes place at the same time as the Create Domain and Update Domain commands. The host object is seen as a property of the domain object and thus the transactions on the host are not implemented.

3.1.1   Create Contact

The registration of a new contact is made by using Create Contact command.

3.1.1.1   Contact object fields required

The Create command needs the following information:

- **ID of the contact** (with a specific format described below)

- **Just one PostalInfo** organized as follows:
  - **Name**
  - Organization (required if the Registrant is not a natural person)
  - **Address** organized as follows:
    - **Street/Square 1**
    - Street/Square 2
    - Street/Square 3
    - **City**
    - **Province**
    - **Postcode (postalcode)**
    - **Nation (countryCode)**
- **Phone**

- Phone extension

- Fax

- Fax extension

- **Email**

- **Contact AuthInfo**

- *ConsentForPublishing*

- *Registrant Data* (only required for Registrants)
  - *Nationality (nationalityCode)*
  - *EntityType*
  - *RegCode*

The ID of the contact is an alphanumeric code that uniquely identifies a contact ("registrant", "admin" and "tech") within the Registry Database.
The characters accepted are: letters (a-z A-Z), hyphen (-) and digits (0-9).
The AuthInfo contact, i.e. the password for the authorization of the request for specific transactions, is ignored by the server. However, since it is a required field, it must always be filled, if necessary just with a zero value (see Section 3.1.1.3).
The section relating to Registrant data is required only if the contact to register is the same as the Registrant of the domain name.
If the section concerning the Registrant is not filled in, the contactID to be registered can only be referenced as a technical or administrative contact of the domain name. If, however, the section relating to the Registrant is filled in, the same contactID can be used to reference both the Registrant of a domain name and the administrative contact and/or technical contact.

The following table shows the contact object fields and their correspondence with the XML tag of the request:

Field	Description	XML Tag	XML Tag Attribute	Cardinality	Length	Value
Contact ID	Unambiguous identifier of the contact (technical, administrative or registrant)	contact:id		1	1-16	Alphanumeric value given by Registrar. Characters accepted are: letters (a-z A-Z), hyphen (-) and numbers (0-9).
PostalInfo		contact:postalInfo (only type="loc")		1		

Name	First and family name of the contact	contact:name		1	2-255	
Organization	Identifies the organization which the contact belongs to	contact:org		0-1	2-255	Mandatory only if the Registrant is not a natural person (EntityType <> 1). It must be equal to the Name value if the Registrant is a natural person (EntityType = 1). If Nationality = IT, it must contain at least one alphabetical character. If Nationality <> IT, it must contain at least one alphanumeric character.
Address	Postal address: street, city, province, post code, country	contact:addr		1		
Street / Square	Name of street or square plus house/office number; of the registered office / residence of the contact	contact:street		1-3	1-128	A max. of 3 street fields can be filled.
City	Name of the city of the registered office / residence of the contact	contact:city		1	1-128	
Province	Initials of the province or name of the foreign country relating to the registered office / residence of the contact	contact:sp		1	1-128	If Country = IT, the province must contain the two letters corresponding to an Italian province.
Post code	Postcode of the city relating to the registered office / residence of the contact	contact:pc		1	1-16	Post code.
Country	Acronym of the country relating to the registered office / residence of the contact	contact:cc		1	2	The ISO 3166-1 code of the country must be given (e.g. IT, FR, NL). This coincides with the value of the Nationality field if the Registrant is not a natural person (EntityType <> 1).
Telephone	Telephone number of the contact	contact:voice		1		ISO international format must be used (e.g. +39.050315000).
Telephone extension number	Extension number	contact:voice	x	0-1	1-10	A value with a maximum of ten digits must be inserted.
Fax	Fax number of the contact	contact:fax		0-1		ISO international format must be used (e.g. +39.050315000).

Fax extension number	Extension Number	contact:fax	x	0-1	1-10	Max. 10 (ten) digits can be inserted.
Email	Contact's email address	contact:email		1		Use the RFC2822 and following format (e.g.: user@domain.it). If the email address contains, on the right of the "@" character, non-ASCII characters (see Section 2.2), it must be indicated in Punycode format (e.g.: "postmaster@xn--citt-3na.it" and not "postmaster@città.it").
AuthInfo	Identifies the authorization password for specific operations on the contact	contact:authInfo		1		Ignored by server. Can be present and can be empty.
Disclose		contact:disclose		0-1		Ignored by server.
ConsentForPublishing	Boolean value to allow the publication of contact's personal data	extcon:consentForPublishing		1	1	Values allowed: true / 1 to allow false / 0 to deny
Registrant's Data		extcon:registrant		0-1		
Nationality	Identifies contact's nationality	extcon:nationalityCode		1	2	Must be one of the ISO 3166-1 codes corresponding to the nationality of the Registrant (e.g.: IT, FR, NL, ..). If the Registrant is not a natural person (EntityType <> 1) it must be equal to the Nation value.
EntityType	Numeric value to identify Registrant typology	extcon:entityType		1	1	Allowed values: 1. Italian and foreign natural persons 2. Companies/one man companies 3. Freelance workers/ professionals 4. non-profit organizations 5. public organizations 6. other subjects 7. foreigners who match 2-6.

RegCode	Domain name registrant's Tax-code	extcon:regCode		1	1-36	If EntityType = 1: if the Registrant is an Italian natural person, it contains his/her tax code ("Codice Fiscale"); for foreigners it can contain a document number. If EntityType = 4 and the Registrant is an association without VAT number and numeric tax code, it must be equal to "n.a.". If EntityType = 7: it contains the VAT number. In all the other cases, it must be equal to VAT number or the numeric tax code.

3.1.1.2 Validation steps for Contact registration

The system verifies that the request to Contact is compatible with:

- the constraints present in the XML Schema *epp-1.0.xsd, eppcom-1.0.xsd, contact-1.0.xsd, extcon-1.0.xsd* (see Appendix A - The EPP protocol);

- the following additional restrictions:
  - the ID of the person must not begin with the prefix "DUP" (used to identify duplication of contacts);
  - the ID of the contact must contain letters (a-z A-Z), hyphen (-) and/or digits (0-9);
  - the contact with the specified ID must not be present in the Registry Database;
  - the request must contain all the required fields;
  - it must comply with the cardinality and lenght of different fields;
  - the telephone and fax numbers must be in ISO format (e.g.: +39.0503139811). The international code (e.g.: +39) indicated in the telephone and fax numbers must be valid. Any extension numbers (telephone and fax) in the "x" extension of the "voice" and "fax" fields can only have a maximum of 10 digits;
  - the value of the Email field must be in the format defined by RFC 2822 and later. Moreover, if on the right of the "@" character there are non-ASCII characters (see Section 2.2), it must be indicated in Punycode format (e.g.: "postmaster@xn--citt-3na.it" and not "postmaster@città.it");
  - the values of the Nation and Nationality fields must follow ISO 3166-1 (eg IT, FR, DE, etc.);
  - if the Registrant is other than a natural person (EntityType <> 1), the Nation and Nationality fields must match and must correspond to the ISO 3166-1 code of a country of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation;
  - if the Registrant is a natural person (EntityType = 1):
    - the Nation and Nationality fields may differ but at least one of them must correspond to the ISO 3166-1 code of a country of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation;
    - the Name and Organization (if specified) fields must be the same. Where the

Organization is not specified, it will be forced by the system to the value of the Name field;

- o if the Nation = IT, the Province field must contain the tag of two letters corresponding to a province in Italy;
- o if Nationality = IT:
  - ▪ the Organization field must contain at least one alphabetical character;
  - ▪ if EntityType = 1, RegCode must have the format of a tax code;
  - ▪ if EntityType <> 1, RegCode must be of the form of a VAT number (11 digits) or tax identification number;
  - ▪ if EntityType = 4, RegCode must be of the form of a numeric tax code or the value "n.a." but only in case of associations with no VAT number or no numeric tax code;
- o if Nationality <> IT:
  - ▪ the Organization field must contain at least one alphanumeric character;
  - ▪ if the Registrant is an entity other than a natural person, the field EntityType must contain the value 7.

3.1.1.3 Examples of a Create Contact request

Example 1

Create Contact command for registering an administrative or technical contact. In the request for Create Contact below, the section on data from the Registrant is missing:

```xml
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
  <epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
    <command>
      <create>
        <contact:create
          xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
          xsi:schemaLocation="urn:ietf:params:xml:ns:contact-1.0
          contact-1.0.xsd">
        <contact:id>mr0001</contact:id>
        <contact:postalInfo type="loc">
          <contact:name>Mario Rossi</contact:name>
            <contact:addr>
              <contact:street>Via Moruzzi 1</contact:street>
              <contact:city>Pisa</contact:city>
              <contact:sp>PI</contact:sp>
              <contact:pc>56124</contact:pc>
              <contact:cc>IT</contact:cc>
            </contact:addr>
        </contact:postalInfo>
        <contact:voice x="2111">+39.050315</contact:voice>
        <contact:fax>+39.0503152593</contact:fax>
        <contact:email>mario.rossi@example.it</contact:email>
        <contact:authInfo>
          <contact:pw></contact:pw>
        </contact:authInfo>
      </contact:create>
    </create>
     <extension>
       <extcon:create
         xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
          xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extcon-1.0
extcon-1.0.xsd">
         <extcon:consentForPublishing>true</extcon:consentForPublishing>
         </extcon:create>
```

```
      </extension>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

Example 2
Create Contact for the registration of a Registrant contact. The section relating to the Registrant data is present in the command.

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
  <epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
    <command>
      <create>
        <contact:create
          xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
          xsi:schemaLocation="urn:ietf:params:xml:ns:contact-1.0
          contact-1.0.xsd">
          <contact:id>mr0001</contact:id>
          <contact:postalInfo type="loc">
            <contact:name>Mario Rossi</contact:name>
              <contact:org>Mario Rossi</contact:org>
              <contact:addr>
                <contact:street>Via Moruzzi 1</contact:street>
                <contact:city>Pisa</contact:city>
                <contact:sp>PI</contact:sp>
                <contact:pc>56124</contact:pc>
                <contact:cc>IT</contact:cc>
              </contact:addr>
          </contact:postalInfo>
          <contact:voice x="2111">+39.050315</contact:voice>
          <contact:fax>+39.0503152593</contact:fax>
          <contact:email>mario.rossi@example.it</contact:email>
          <contact:authInfo>
            <contact:pw></contact:pw>
          </contact:authInfo>
        </contact:create>
      </create>
       <extension>
         <extcon:create
           xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
           xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extcon-1.0
extcon-1.0.xsd">
         <extcon:consentForPublishing>true</extcon:consentForPublishing>
           <extcon:registrant>
             <extcon:nationalityCode>IT</extcon:nationalityCode>
             <extcon:entityType>1</extcon:entityType>
             <extcon:regCode>RSSMRA64C14G702Q</extcon:regCode>
           </extcon:registrant>
         </extcon:create>
       </extension>
      <clTRID>ABC-12345</clTRID>
    </command>
  </epp>
```

3.1.1.4 Examples of responses to a Create Contact request

Example 1
Response to a successful Create Contact :

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
   <result code="1000">
     <msg lang="en">Command completed successfully</msg>
   </result>
  <resData>
    <contact:creData>
      <contact:id>MR0001</contact:id>
      <contact:crDate>2013-04-16T11:43:32+02:00</contact:crDate>
   </contact:creData>
   </resData>
  <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>e0638c11-d2bc-47bb-ac05-d44fb19606af</svTRID>
  </trID>
 </response>
</epp>
```

Example 2

Response to a failed Create Contact. The error is in the tax-code of the Registrant indicated in RegCode of the request:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
 <response>
   <result code="2004">
     <msg lang="en">Parameter value range error</msg>
    <value>
      <extepp:wrongValue>
        <extepp:element>regCode</extepp:element>
        <extepp:namespace>http://www.nic.it/ITNIC-EPP/extcon-
1.0</extepp:namespace>
        <extepp:value>LFFMRA64M22H999P</extepp:value>
      </extepp:wrongValue>
    </value>
    <extValue>
        <value>
           <extepp:reasonCode>8027</extepp:reasonCode>
        </value>
        <reason lang="en">Registrant: invalid reg code</reason>
    </extValue>
   </result>
   <trID>
```

```
      <clTRID>ABC-12345</clTRID>
      <svTRID>72a0a5ea-92a2-4086-ad58-222fa653bc55</svTRID>
    </trID>
  </response>
</epp>
```

3.1.1.5   Effects of the Create Contact

If the Create Contact command submitted by the Registrar is executed successfully and passes the validation steps described in Section 3.1.1.2, a contact is registered in the Registry Database and the following fields are set:

- if the contact is a "registrant" and is a natural person (i.e., EntityType = 1), the Organization field, if empty, is forced to the value of the Name field;

- registration data (coinciding with the date and time of insertion of the contact into the Database);

- current client ID;

- client ID that carried out the registration;

- the contact goes into **ok**.

3.1.2   Create Domain

A new domain name is registered by using the Create Domain command.

3.1.2.1   Fields of the domain object required

The Create Domain command needs the following information:

- **Domain name**

- Period of validity of the domain name (ignored by the server - default 1 year)

- **List of host items associated with the domain name** organized as follows:
  - host name
  - for hosts subordinate to the domain name:
    - IPv4 address and, in case IPv6 address.

- **The Registrant** (specifying the ID of the contact associated with the Registrant)

- **admin contact type** (specifying the ID of the administrative contact)

- **tech contact type** (specifying the ID of the technical contact)

- **AuthInfo of the domain name**

If the Registrant is a natural person (EntityType = 1) the Registrant and administrative contact (admin) must be the same. These fields will therefore contain the same contactID associated with a contact already registered in the Registry Database, including the extension of the Registrant.
If the Registrant contact (registrant) indicated in the Create Domain request does not contain all the requested fields, the registration operation fails. This situation can occur, for example, in case of Registrant contacts created in the old "asynchronous" registration system and migrated into the new "synchronous" registration system.

The following table shows the fields of the domain object and the related correspondence with the XML tag of the request:

Field	Description	XML Tag	XML Tag Attribute	Cardinality	Value
Domain name	Domain name to be registered	domain:name		1	Bear in mind the following limitations: - second level domain name minimum length is 3 characters - maximum length for every domain name part is 63 characters. Total length cannot be greater than 255 characters - characters accepted: ASCII and non-ASCII characters indicated in Section 2.2 - each domain name part cannot begin or end with the "-" character - the domain name must not begin with the string "xn--", which is reserved for the IDN encoding of a domain name. In case of IDN domain names, the domain name must be indicated in native format and not in Punycode (e.g.: "città.it" and not "xn--citt-3na.it")
Period	Domain name validity period	domain:period		0-1	Ignored by server. Default value is a year
Time unit		domain:period	unit="y|m"	0-1	
Domain name associated hosts	Domain name associated hosts list as host name and ip address couples	domain:ns		1	
Host properties		domain:hostAttr		2-6	Number of associated hosts for a domain must be between 2 and 6
Host name	Associated host name	domain:hostName		1	If the host name contains non-ASCII characters (see Section 2.2) it must be indicated in Punycode format (e.g.: "ns.xn--citt-3na.it" and not "ns.città.it")
IP address	Host's IP address	domain:hostAddr		0-2	Only required for the hosts subordinate to the domain name and it is needed to generate the "glue records". It is possible to indicate up to a maximum of two IP addresses for nameserver where at least one and not more than one, must be an IPv4

IP address type	Specify IPv4 or IPv6 for every IP address	domain:hostAddr	ip	0-1 (default "v4")	Default type is "IPv4"
Registrant	Identifies the person or the organization requesting a domain name registration or has already one assigned	domain:registrant		1	Must contain the contactID associated with the Registrant, already registered in the Registry's database by the Registrar
Admin contact	Identifies the domain name admin contact	domain:contact	type="admin"	1	Must contain the contactID associated with the admin contact, already registered in the Registry's database by the Registrar. If the Registrant is a natural person, admin and Registrant fields must be the same
Technical Contact	Identifies the domain name technical contact	domain:contact	type="tech"	1-6	Must contain the contactID associated with the technical contact, already registered in the Registry's database by the Registrar
Domain name AuthInfo	Identifies the authorization password for specific operation on the domain name	domain:authInfo		1	Alphanumeric value given by the Registrant to the domain name Registrant. Its length is between 8 to 32 characters.

Section 3.1.2.3 contains some examples of Create Domain requests for the registration of a domain name by a "non DNSSEC accredited" Registrar.

Section 5.5 instead, contains examples of Create Domain requests for the registration of a digitally signed domain name by a "DNSSEC accredited" Registrar.

3.1.2.2   Validation steps for the registration of a domain name

The system verifies that the request for Create Domain is compatible with:

● the constraints present in the XML Schema *epp-1.0.xsd, eppcom-1.0.xsd, domain-1.0.xsd, host-1.0.xsd* (see Appendix A - The EPP protocol);

● the following additional restrictions:
  o the Registrar that has sent the request must not be suspended;
  o the domain name have the ".it" region suffix;
  o the domain name cannot be reserved, geographical or non-assignable as specified in the "Rules";
  o the domain name applied for must not be present in the Registry Database;
  o the domain name requested must meet the following requirements:
    ▪ minimum length of 3 characters for second-level domain names;
    ▪ maximum length of 63 characters for each component of the domain name. The length must not exceed 255 characters;
    ▪ characters accepted: ASCII and non-ASCII characters indicated in Section 2.2 ;
    ▪ each component cannot begin or end with a hyphen (-);
    ▪ must not contain the string "xn--" in the first four characters, which is reserved for the IDN encoding of a domain name. In case of IDN domain names, the domain name must be indicated in native format and not in Punycode (e.g.: "città.it" and not "xn--citt-3na.it");

o the request must contain all the required fields;
o it must comply with the cardinality of different fields;
o AuthInfo must have a minimum length of 8 characters and maximum of 32 characters;
o the ID of the contacts referenced in the domain name to register (registrant, admin and tech) must already be present in the Registry Database;
o the Registrant with the specified ID must be present in the Registry Database and created as a Registrant contact (i.e. the fields filled for the data section of the Registrant);
o the contact list must not contain the same two contacts with the same role;
o the number of administrative and technical contacts must comply with the table in Section 6.11 ;
o if the domain name is requested by a natural person, the Registrant and Admin fields must be the same, that is the Admin field must contain the same contactID as the one indicated in the Registrant field;
o the number of hosts to be associated with the domain name must comply with the table in Section 6.11 ;
o the host list cannot contain two hosts with the same IP address or with the same name;
o the number of the IP addresses of the host/s subordinate to the domain name must comply with what stated in the table in Section 6.11 ;
o for each host subordinate to the domain name, it is possible to specify up to a maximum of two IP addresses for nameserver where one and not more than one is of IPv4 type (glue record);
o the hosts containing non-ASCII characters (see Section 2.2) must be indicated in Punycode format (e.g.: "ns.xn--citt-3na.it" and not "ns.città.it").

3.1.2.3 Examples of Create Domain requests

Example 1

Create Domain command to register a domain name ("example.it") maintained by subordinate hosts ("ns1.example.it" and "ns2.example.it"):

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
  <epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
   <command>
     <create>
      <domain:create
        xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
        xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0
          domain-1.0.xsd">
      <domain:name>example.it</domain:name>
      <domain: period unit="y">1</domain:period>
      <domain:ns>
       <domain:hostAttr>
        <domain:hostName>ns1.example.it</domain:hostName>
        <domain:hostAddr ip="v4">193.205.245.70</domain:hostAddr>
       </domain: hostAttr>
       <domain: hostAttr>
        <domain:hostName>ns2.example.it</domain:hostName>
        <domain:hostAddr ip="v4">193.205.245.77</domain:hostAddr>
       </domain:hostAttr>
      </domain:ns>
      <domain:registrant>mr0001</domain:registrant>
      <domain:contact type="admin">cl8013</domain:contact>
      <domain:contact type="tech">mb8015</domain:contact>
      <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
```

```
        </domain:authInfo>
      </domain:create>
    </create>
      <clTRID>ABC-12345</clTRID>
   </command>
  </epp>
```

The IP addresses of the hosts "ns1.example.it" and "ns2.example.it" are mandatory because they are subordinate with respect to the domain name "example.it" to register.

Example 2

Create Domain for the registration of a domain name ("paperino.it") managed by hosts that are not subordinate ("ns1.example.it" e "ns.dominio.org"):

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <create>
      <domain:create
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>paperino.it</domain:name>
        <domain:period unit="y">1</domain:period>
       <domain:ns>
         <domain:hostAttr>
           <domain:hostName>ns1.example.it</domain:hostName>
         </domain:hostAttr>
         <domain:hostAttr>
           <domain:hostName>ns.dominio.org</domain:hostName>
         </domain:hostAttr>
       </domain:ns>
        <domain:registrant>mm-001</domain:registrant>
        <domain:contact type="admin">mm-001</domain:contact>
        <domain:contact type="tech">mb-001</domain:contact>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:create>
    </create>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

The IP addresses of the hosts "ns1.example.it" e "ns.dominio.org" are not inserted into the request because they are not subordinate with respect to the domain name "paperino.it" to register.

Example 3

Create Domain command to register a domain name ("example.it") maintained by subordinate hosts ("ns1.example.it" and "ns2.example.it"). The nameserver ns1.esempio.it is associated with both IPv4 and IPv6 addresses:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
 <epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
        xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
      <command>
        <create>
          <domain:create
           xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
           xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0
           domain-1.0.xsd">
            <domain:name>example.it</domain:name>
            <domain: period unit="y">1</domain:period>
            <domain:ns>
              <domain:hostAttr>
               <domain:hostName>ns1.example.it</domain:hostName>
               <domain:hostAddr ip="v4">192.12.192.5</domain:hostAddr>
             <domain:hostAddr ip="v6">2a00:d40:1:1::5</domain:hostAddr>
               </domain: hostAttr>
               <domain: hostAttr>
                <domain:hostName>ns2.example.it</domain:hostName>
               <domain:hostAddr ip="v4">193.205.245.77</domain:hostAddr>
               </domain:hostAttr>
            </domain:ns>
            <domain:registrant>mr0001</domain:registrant>
            <domain:contact type="admin">cl8013</domain:contact>
            <domain:contact type="tech">mb8015</domain:contact>
            <domain:authInfo>
                 <domain:pw>22fooBAR</domain:pw>
            </domain:authInfo>
          </domain:create>
        </create>
        <clTRID>ABC-12345</clTRID>
      </command>
    </epp>
```

The examples shown above correspond to Scenario 1 in Section 3.1.5.

3.1.2.4   Examples of responses to a Create Domain request

Example 1
Response to a successful Create Domain:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
        <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
       <domain:creData>
          <domain:name>esempio.it</domain:name>
          <domain:crDate>2013-04-16T11:43:32+02:00</domain:crDate>
          <domain:exDate>2014-04-16T23:59:59+02:00</domain:exDate>
       </domain:creData>
    </resData>
    <trID>
```

```
        <clTRID>ABC-12345</clTRID>
        <svTRID>be47652c-5c3f-4e77-b41d-1104df945cc4</svTRID>
     </trID>
  </response>
 </epp>
```

The domain name specified in the Create Domain request is registered in the Registry's Database and is put in **inactive/*dnsHold*** status.

Example 2
Response to a failed Create Domain. The error is in the fact that in the request for regisration of a domain name a contact not created as a registrant is shown as a Registrant.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="2308">
        <msg lang="en">Data management policy violation</msg>
      <value>
       <extepp:wrongValue>
          <extepp:element>registrant</extepp:element>
 <extepp:namespace>urn:ietf:params:xml:ns:domain-1.0</extepp:namespace>
          <extepp:value>CL-007</extepp:value>
       </extepp:wrongValue>
      </value>
      <extValue>
      <value>
        <extepp:reasonCode>8030</extepp:reasonCode>
      </value>
        <reason lang="en">Contact is not a registrant</reason>
      </extValue>
    </result>
    <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>5579b9db-d1ad-46a2-850f-381ea1fb1551</svTRID>
    </trID>
  </response>
</epp>
```

Example 3
Response to a successful Create Domain following the registration of a domain name with "*remapped*" characters (see Section 2.2.2).

```
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0">
  <response>
    <result code="1000">
```

```
          <msg lang="en">Command completed successfully</msg>
      </result>
      <msgQ id="296945" count="21">
        <qDate>2014-05-14T10:00:47.000+02:00</qDate>
        <msg lang="en">dnsHold is started</msg>
      </msgQ>
      <resData>
        <domain:creData>
         <domain:name>ἀἀἀἀ.it</domain:name>
         <domain:crDate>2014-05-15T16:13:02.092+02:00</domain:crDate>
         <domain:exDate>2015-05-15T23:59:59.999+02:00</domain:exDate>
        </domain:creData>
      </resData>
      <extension>
        <extdom:remappedIdnData>
          <extdom:idnRequested>ἀιἀιἀιἀι.it</extdom:idnRequested>
          <extdom:idnCreated>ἀἀἀἀ.it</extdom:idnCreated>
        </extdom:remappedIdnData>
      </extension>
      <trID>
        <clTRID>RTRT-00017</clTRID>
        <svTRID>25a61bec-0c95-4c8c-b842-6c10fb594074</svTRID>
      </trID>
    </response>
</epp>
```

The response includes the extension "**extdom:remappedIdnData**" that contains the IDN domain name requested in the Create Domain command ("**extdom:idnRequested**") and the domain name actually recorded as a result of transformation ("**extdom:idnCreated**").

3.1.2.5   Effects of the Create Domain request

If the Create Domain command submitted by the Registrar is executed successfully and passes the validation steps described in Section 3.1.2.2, a domain is registered in the Registry Database and the following fields are set:

- date of registration (coinciding with the date and time for entering the domain name in the Database);

- current client ID;

- client ID that carried out the registration;

- expiry date of the domain name;

- the domain name goes into **inactive/***dnsHold* status;

- the domain name is debited to the Registrar and is immediately available for invoicing.

The contacts specified that were not referenced go into **ok/***linked* status.
The Registry, upon registration of the domain name in the Database, emails the Registrant a summary of the data in the Database for the registered domain name, with the following format:

Subject: 10300 - New registration of the domain name <name of the domain>

We inform you that on <registration date> the domain name <name of the domain> has been registered through the Registrar < Registrar>.

The outcome of the registration is:

Registrant:
Address:
Country:
Nationality (for natural persons only):
Phone:
Fax:
RegCode:
Email:
EntityType:

The domain name <name of the domain> has been put in <status> status.

The Registrant, has made the following choice concerning consent:

- consent for personal data treatment for registration: YES

- consent for personal data treatment for diffusion and accessibility via the Internet: <YES/NO (value of consentForPublishing) >

and has made the following declarations and has accepted the following clauses:

- to be citizen or resident in one of the countries of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation (registration for natural person);

- to have the registered office based in one of the countries of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation (registration for subjects other than natural persons);

- to be aware of and to accept that the registration and management of a domain name are subject to the "Rules of assignment and management of domain names in the ccTLD.it" and the "Regulations for the Resolution of disputes in the ccTLD.it and subsequent modifications;

- to have right of use and/or legal availability of the registered domain name requested and not to prejudice, with this registration request, the rights of third parties;

- to be aware that in order to fulfill personal data on the database of assigned domain names, and for their possible diffusion and accessibility on Internet, it is necessary to give express consent checking the relevant boxes on the basis of the information below. On the Registry website (http://www.nic.it) the document "The policy of the .it Registry about the Whois database" is available;

- to be aware of and to accept that in case of erroneous or false declaration in the present request, the Registry will proceed to the immediate revocation of the domain name, reserving the right to take out further legal action. In this case the revocation cannot give rise in any way whatsoever to requests for damages to the Registry;

- to release the Registry from any responsibility deriving from assignment or use of the domain name on the part of the requesting natural person;

- to accept Italian jurisdiction and the laws of the Italian State.

We inform you that the Registrar mentioned above is responsible for personal data treatment and that the CNR, through the Institute of Informatics and Telematics, is the holder.
As specified in the registration form, the data will be released to third parties for the activation of opposition and the defense of rights as well as the fulfillment of obligations of law or regulation.
Should you need further information, please contact the Registrar indicated in the registration and whose data are available on the website of the Registry http://www.nic.it.

Best regards,

Registro .it
Istituto di Informatica e Telematica
CNR - AREA DELLA RICERCA
Via Giuseppe Moruzzi, 1 - I-56124 PISA
Tel: +39 050 3139811
Fax: +39 050 3152713 (External Relations)
Email: hostmaster@nic.it

The DNS configuration for the list of hosts mentioned in Create Domain command is checked in a non-simultaneous transaction. If the host configuration check fails, the EPP server of the Registry inserts in the polling queue of the Registrar, a notification report with all the checks carried out and their results. The domain name remains in inactive/*dnsHold* status if its DNS configuration is not correct. The server will periodically check whether the DNS configuration for the domain name in inactive/*dnsHold* is positive. When this occurs, the server will put in the Registrar polling queue a message that DNS has been successful and the domain name itself will go into **ok** status. At the same time, the Registry emails the Registrant the same communication above mentioned.
A domain name in inactive/*dnsHold*, can be subjected to any operation.
The following diagram shows the various steps leading to the registration of a new domain name:
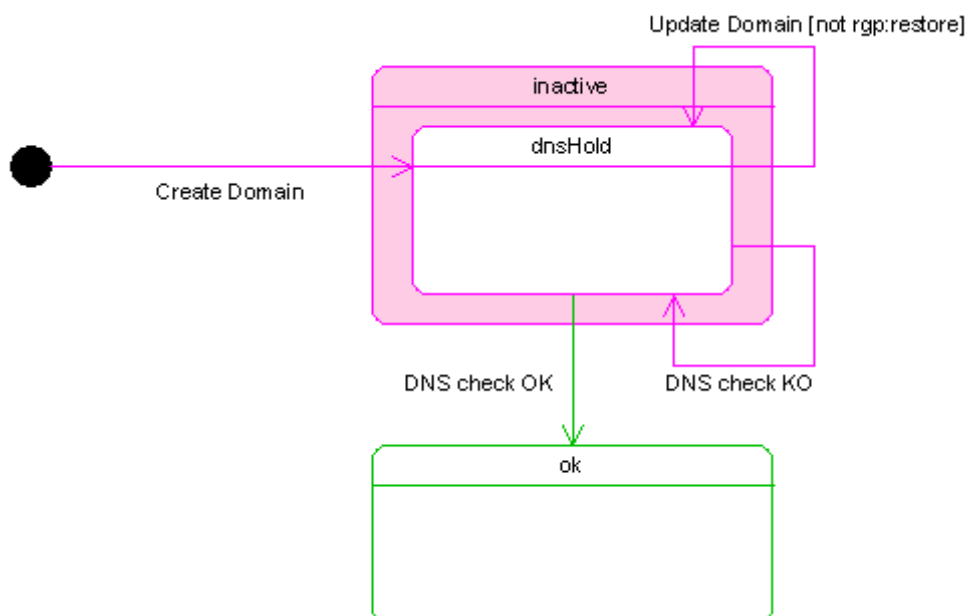
3.1.2.6 Checking the functionality of the nameservers

The verification phase of the configuration of the nameservers that must be associated with the domain name takes place after the registration of the new domain name in the Registry Database

or after the change of the hosts (see Section 3.2.2).

The procedure for the control of nameservers analyzes the hosts that must be associated with domain names registered in the Registry Database that are either in inactive*/dnsHold* status or in pendingUpdate and executes the appropriate query (i.e. queries to the nameserver) to verify that it is actually operative. In particular:

- there must be at least 2 (two) authoritative nameservers for the domain name, and they must correspond exactly to those found in the registration request of the domain name or in the hosts change request;

- the IPv4 and, if indicated, the IPv6 address of the hosts subordinate to the domain name, must correspond to those actually associated with them in the DNS;

- the IPv4 and, if indicated, the IPv6 address of the hosts subordinate to the domain name, must answer in an authoritative way;

- the domain name cannot be associated with a CNAME record;

- the name of the nameserver specified in the SOA record for the domain name cannot be a CNAME;

- the names of the authoritative nameservers for the domain name cannot be CNAMEs;

- if there is an MX registration it cannot be associated with a CNAME;

- if, during the checking procedure, at least one nameserver returns the following responses:
  - Not responding
  - Not reachable
  - Not running
  - Non-existent domain
  - Host not found
  - Server failure
  - Query failed

  the procedure returns an error;

- all hosts in the registration must be authoritative for the domain name registered.

The list of the checks carried out by the dns validator of the Registry is the following:

- *NameserversResolvableTest*: it verifies what are the nameservers that are resolvable

- *NSQueryAnswerTest*: it verifies what are the nameservers for which the query has given an answer to the NS query. The answer must be authoritative and contains a NOERROR return code

- *IPSOATest*: if a nameserver has more than one IP address, it carries out a query of SOA type for all the indicated addresses verifying whether they respond in an authoritative way or not, and that the serial numbers match

- *NameserverReturnCodeTest*: it verifies that the header of the response of the queries carried out for the nameservers to be validated, contains a NOERROR return code

- *AATest*: it verifies whether the nameservers that must be validated, are authoritative for the domain name or not

- *NSCountTest*: it verifies that the number of NS records complies with the table in Section 6.11

- *NSCompareTest*: it verifies the correspondence between the nameservers listed in the registration request or in the hosts change request with those inserted in the NS records of the zone file

- *CNAMEHostTest*: it verifies that the nameservers inserted in the SOA, NS and where indicated MX records, are not a CNAME

- *IPCompareTest*: it verifies the correspondence between the IP addresses, if indicated, of the namservers to be validated and those actually associated to them by means of A records

- *MXQueryAnswerTest*: it verifies what are the nameservers for which the query has given an answer to the MX query. The answer must be authoritative and contains a NOERROR return code

- *MXCompareTest*: it verifies that the same mailservers are indicated in the MX records of the zone file of the nameservers to be validated

- *MXRecordIsPresentTest*: it verifies the presence of the MX records in the zone file of the nameservers to be validated. MX records are not compulsory

- *SOAMasterCompareTest*: it verifies that the same hostname is present in the SOA record of the zone file of the nameservers to be validated

- *SOAQueryAnswerTest*: it verifies what are the nameservers for which the query has given an answer to the SOA query. The answer must be authoritative and contains a NOERROR return code.

In case of digitally signed domain names, further checks, described in Section 5.12 of this document, are activated.

The DNS configurations checks are activated in the following way:

- if the domain name is in inactive/*dnsHold* status:
  - immediately after the Create Domain request;
  - immediately after every subsequent Update Domain request to change the DNS configuration;
  - every 30 minutes for the first 30 days following the registration of the domain name;
  - once a day after the 30 days following the registration of the domain name;

- if the domain name is in pendingUpdate status:
  - immediately after every Update Domain request to change the DNS configuration;
  - every 30 minutes until the expiration of the period of pendingUpdate (5 days).

3.1.3   Request for a domain name subject to a cancellation in the previous 7 (seven) days

To register a domain name that is subject to a cancellation in the previous 7 (seven) days, the Registrar must submit the Create Domain command (see Section 3.1.2) to the "epp-deleted.nic.it" server.
Requests sent to the "epp.nic.it" server will therefore be rejected.
The table in Section 6.11 of this document shows the maximum number of daily requests for the registration of domain names that have been cancelled within less than 7 (seven) days that Registrars can send to the "epp-deleted.nic.it" server.

3.1.4   Request to register a reserved domain name

A request to register a reserved domain name (in accordance with the "Rules") takes place asynchronously.
The Registrant must send to the Registry a paper request formatted in accordance with the forms referred to in Section 3.1.4.1 of this document, containing their data, the chosen Registrar, their contactID (which the Registrar must have already registered) and two authoritative nameservers for the domain name. Moreover, for each host subordinate to the domain name, it is necessary to specify the IPv4 address and in case also the IPv6 address.
Each form is divided into four parts:

- the first part contains the following information:
  - the domain name of the request. The table in Section 3.1.2.1 shows the restrictions on the domain name length and the characters accepted;
  - the personal and tax details of the natural person, who as representative of the Registrant endorses the request, as well as the registered office and tax data;
  - the new identifier of the Registrant (contactID);
  - two authoritative nameservers for the domain name. The nameservers containing non-ASCII characters (see Section 2.2) must be specified in Punycode format (e.g.: "ns.xn--citt-3na.it" and not "ns.città.it"). For each host subordinate to the domain name, it is necessary to specify the IPv4 address and in case also the IPv6 address;
  - the tag of the Registrar (REG tag);

- the second part is related to indemnity in case of a false statement;

- the third part contains:
  - the place and date in which the document is produced;
  - the signature of the natural person or the legal representative of the Registrant;

- the fourth part is related to a disclosure on the protection and processing of personal data.

No variations to the forms mentioned above can be made. The Registrant must complete all the required fields, which are summarized in the table below.

Compilation of the request to register a reserved domain name

Requested data	Reserved domain names to assign to specific categories (e.g. region, province, municipality)	Notes
Name and surname of the applicant and signatory of request	*Mandatory*	(1)
Place of birth	*Mandatory*	(2)
Date of birth	*Mandatory*	(3)
Tax code/ identity card	*Mandatory*	(4)
Business name	*Mandatory*	(5)
Name and surname of legal representative	*Mandatory*	
Registered office	*Mandatory*	(6)
VAT number	*Mandatory*	(7)
Identifier of the Registrant (contactID)	*Mandatory*	(8)
Name and in case IP addresses of two authoritative nameservers for the domain name	*Mandatory*	(9)
Registrar tag	*Mandatory*	(10)
Signature of applicant	*Mandatory*	(11)

	Notes	
(1)	Natural persons who have more than one first name and surname must give them all in full. No tags of first names or surnames are allowed.	
(2)	The place of birth must also be given in full, including the province and/or foreign state.	
(3)	The date of birth of the person (1) must be given in the format "dd-mm-yyyy".	
(4)	Italian citizens must give their tax code. People in other countries of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation where there is not an equivalent of the tax code, must give the number of their identity document.	
(5)	The complete company name of the Registrant of the domain name must be given.	
(6)	The address of the registered office must be given (street, city, province, post code, foreign state, if any) of the Registrant of the domain name listed in (5).	
(7)	The VAT number or tax identification number of the Registrant of the domain name must be given.	

(8)	The identifier of the Registrant (contactID) previously registered by the Registrar of the domain name must be given.
(9)	The nameservers containing non-ASCII characters (see Section 2.2) must be indicated in Punycode format (e.g.: "ns.xn--citt-3na.it" and not "ns.città.it"). The IP address must be indicated only in case of nameservers subordinate to the domain name. Then the IPv4 and in case also the IPv6 address, must be indicated.
(10)	The tag of the Registrar must be given.
(11)	The request must be signed by the person listed in (1).

For Registrants belonging to a member state of the European Economic Area (EEA) other than Italy, the Vatican City State, the Republic of San Marino or the Swiss Confederation the same principles are applied, except as foreseen by current legislation in the single member states.

3.1.4.1   Form for registering a reserved domain name

<div align="right">

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

</div>

Subject: Request to register a reserved domain name _____.*IT*

The undersigned *(first name, surname)* born in *(place of birth and [province or foreign state])* on *(date of birth)* tax code number or identity document number *(tax code or number of identity card for foreign nationals not resident in Italy)*, delegated to represent in the present agreement the organization named *(corporate name)* with legal representative *(first name, surname)* with VAT number *(VAT number or tax code)* with registered office in *(address [street/square, locality, postal code, province or foreign state])*, contact code *(contactID)*, nameserver *(indicate name and possible IP addresses of two authoritative nameservers for the domain name)*, requests the Registry of the ccTLD.it that the domain name in question is assigned to the above-mentioned organization through the Registrar _____ -REG *(tag of the Registrar)*.

The undersigned is aware that the Registry will act by civil action and, where appropriate, criminal, in the case of a false statement. The undersigned also assumes the responsibility to hold harmless and indemnify the Registry in any case where the said misrepresentation causes damage to third parties.

Place, date

<div align="right">

Request to register a reserved domain name - Version 2018-01

The undersigned
Name and Surname

_____
(Signature)

</div>

"Pursuant to art. 13.1 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of individuals with regard to the processing of personal data, the personal data provided by the applicants will be collected by the Institute of Informatics and Telematics, for the purposes strictly connected to the operation of registration of the reserved domain name and will be processed in a database of the IIT for the execution of the operations related to the request itself as well as for the other purposes of the law, and if appropriate for the protection of rights. The Data Controller is the National Research Council, through the IIT - Registro. The data will be communicated to the other party or to the counter-parties and to third parties where required by law, by regulatory provision or by Community law,

or, where appropriate, for the protection of rights. The supply of such data to the Institute of Informatics and Telematics of the CNR is mandatory for the evaluation of the request for access to personal data of the assignee of the domain name.

Pursuant to Article 15 of Reg. EU2016/679, the data subject has the right to obtain access to the personal data concerning himself or herself, to their rectification, integration or erasure, limitation or regarding opposition to their processing at any time, where there are legitimate reasons. The consent given may be revoked at any time. The data subject also has the possibility to make a complaint to the Supervisory Authority."

Notes:

1. In case of IDN domain names, the domain name must be indicated in native format and not in Punycode (e.g.: "città.it" and not "xn--citt-3na.it").

2. The nameservers containing non-ASCII characters (see Section 2.2) must be given in Punycode format (e.g.: "ns.xn--citt-3na.it" and not "ns.città.it"). The IP address must be indicated only in case of nameservers subordinate to the domain name. Then the IPv4 and in case also the IPv6 address must be inserted.

3.1.4.2   Sending the registration request to the Registry

The request for registration can be sent to the Registry, by the Registrant or by the Registrar, by post, courier or fax. We recommend sending it through the Registrar as this is the most efficient way in terms of management. Requests for registration sent by fax must only be sent to +39 050 542420. The requests for registration can be on several pages (A4) and of a size and format different from that given in the forms on the Registry website - but no changes must be made to the wording and contents.

All requests for registration must be addressed to:

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

3.1.4.3   Tests for congruence of the data in the Registry Database

The Registry, upon a legible paper request for registration, checks that:

- the domain name given in the request:
  - has the ".it" suffix;
  - is not registered in the Registry Database;
  - is a reserved domain name;
  - complies with what stated in the table in Section 3.1.2.1;

- the Registrant has the right to register the requested domain name;

- the identifier of the Registrant (contactID) given in the request:
  - is registered in the Database;
  - is registered as a Registrant contact;
  - has been registered by the Registrar set out in the request;
  - is a new contactID;
  - is not referenced as a Registrant of any domain name;

- there is a correspondence between the name of the Registrant listed in the request and that present in the registration of the Registrant in the Database, identified by the contactID also reported in the paper request;

- there is a correspondence between the VAT number or tax identification number of the Registrant listed in the request and the VAT number or tax code in the registration of the

Registrant in the Database, identified by the contactID that is also reported in the paper request;

- the Registrar reported in the request has an active contract with the Registry and transactions have not been suspended;

- two nameservers are specified;

- for each nameserver subordinate to the domain name at least the IPv4 address is indicated;

- the hosts containing non-ASCII characters (see Section 2.2) must be in Punycode format (e.g.: "ns.xn--citt-3na.it" and not "ns.città.it");

- all the mandatory fields have been filled in.

If the checks are not successful, the Registry sends the new Registrar an email containing:

- the domain name;

- the inconsistencies;

- the date and time of receipt by the Registry of the request for change.

3.1.4.4 Conclusion of the operation

If the checks are successful, the Registry will email the Registrar the outcome of the operation and the following data:

- the name of the domain registered;

- the date and time of the receipt of the request;

- the number of pages of the document received.

The Registry will thus:

- assign the domain name to the Registrant;

- generate the "AuthInfo" code for the domain name;

- email the AuthInfo to the Registrar who, in turn, must notify the Registrant;

- associate the technical and administrative contacts of the domain name with the contactID of the Registrant;

- associate the domain name with the nameservers and, in case of hosts subordinate to the domain name, the IP addresses indicated in the request;

- put the domain name into **inactive/*dnsHold*** status, to be subjected to the validation of the DNS configuration;

- invoice the Registrar for the transaction.

3.1.5 Examples of registering a domain name

Here are two possible scenarios to complete the registration of a domain name:

- in scenario 1 a domain name is registered via a sequence of Create Contact and Create Domain commands. The configuration of the nameserver is checked after Create Domain:

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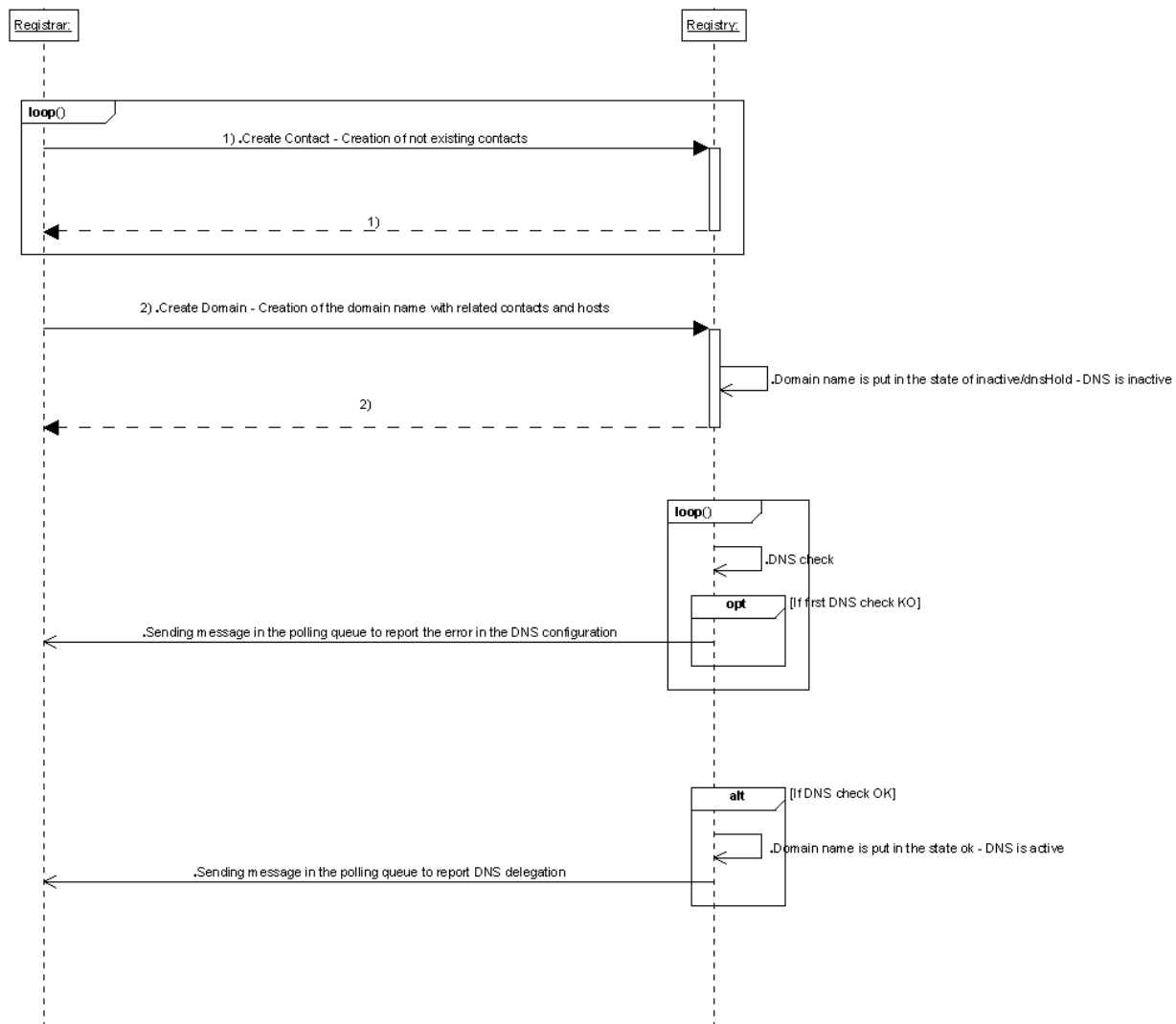
- **in scenario 2** a domain name is registered with a list of hosts that is wrong, and is then changed by the Registrar through a Domain Update. The configuration of the nameserver is checked after Update Domain.
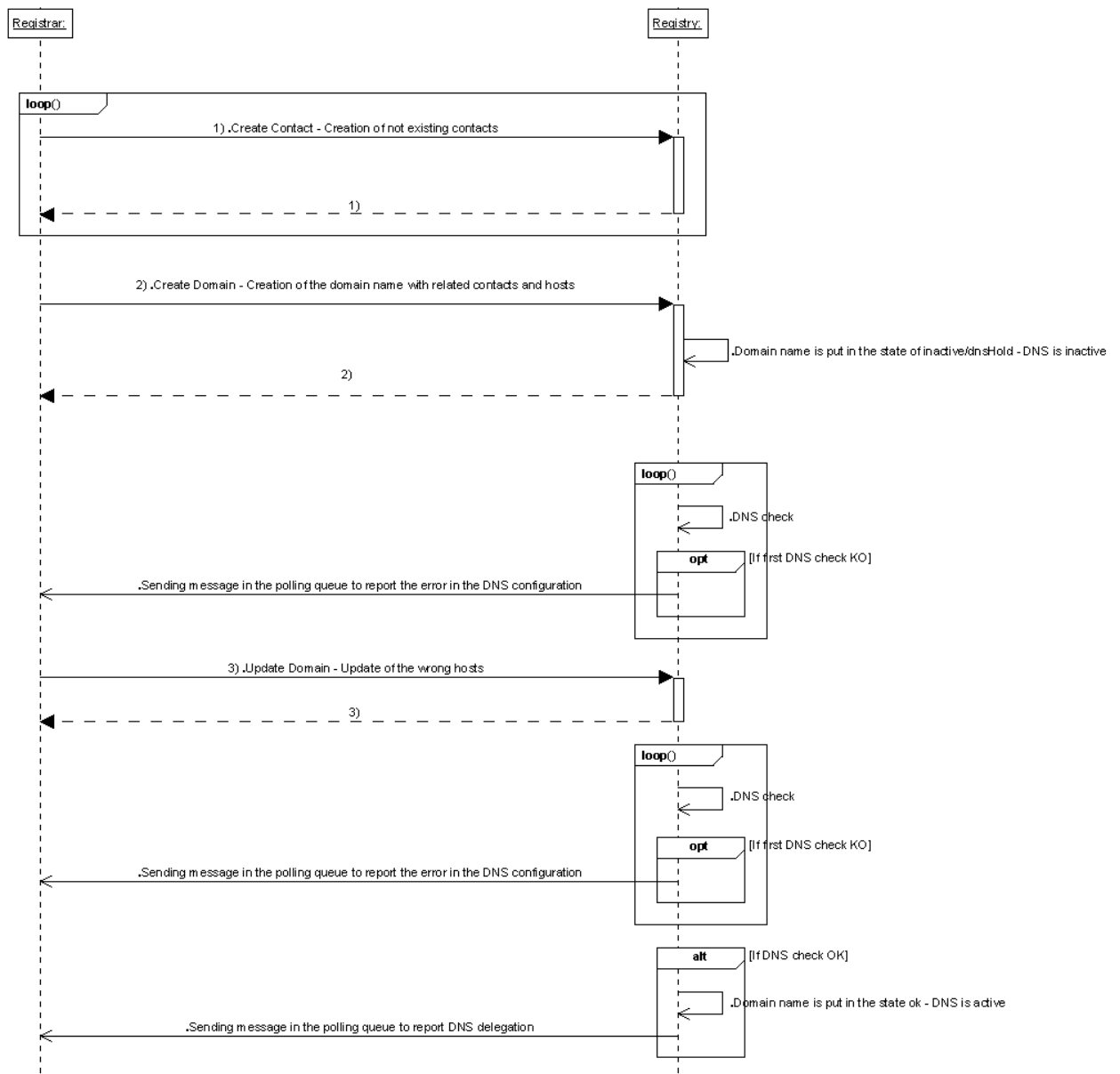
3.1.6 Procedures for the acquisition by the Registrar of the declaration and assumption of responsibility by the Registrant

The Registrar must obtain the data of the Registrant and the explicit acceptance by the Registrant, of any specific clause regarding declaration and assumption of responsibility for the domain name assignment. In this regard, the Registrar must give the Registrant a "registration form" formatted according to the template referred to in Section 3.1.6.1, which is a prerequisite for the correct registration of a domain name. The Registrar must make the form available for the Registrant, also by means of automated procedures, both for first registration and either following a Change of Registrant or a Registrar Transfer (with or without a Trade).

3.1.6.1 Registration Form

The Registrar must create the form formatted as indicated below:

Registration Form

(*The Registrant's data below refer to a domain name registered by the company "XY S.r.l.". For other types of Registrants the data must be indicated in the appropriate manner*).

Sect. 1 - Registrant

Registrant: "Name of Registrant"	(e.g. XY Srl)
Legal representative: "Name surname of the legal representative" for entities other than a natural person	(e.g. Mario Bianchi)
Tax code of legal representative: "Tax code of legal representative"	(e.g. BNCMRA56A01H501A)
Address: "Complete Address"	(e.g. Via Caspio, 9 00100 Roma - RM)
Country: "ISO3166-1 Code of the Country"	(e.g. IT)
Nationality: "ISO3166-1 code of the Country - only for natural persons"	(e.g. IT)
Phone: "Phone number in international format"	(e.g. +39.06776511)
Fax: "Fax number in international format"	(e.g. +39.06776512)
Regcode: "VAT/Tax code"	(e.g. 09558132581)
Email: "Email Address"	(e.g. xyzo@pippo.it)
EntityType: "Type of Registrant"	(e.g. 2 - company/firm)

Sect. 2 - Registration form for the domain name *pippo*.it

XY S.r.l. (*name/title*)/The applicant (*if a natural person*), Registrant of the domain name pippo.it, hereinafter Registrant, with registered office in Via Caspio, 9 00100 Roma (RM) - IT/natural person (*street/square, town, post code, province, VAT, if applicable*) telephone number (*give phone number*), fax number (*give fax number*), e-mail xyzo@pippo.it (*give Registrant e-mail*), legally represented by Mario Bianchi, tax code BNCMRA56A01H501A, requests the registration of the domain name pippo.it - through the Registrar (*XY-Registrar*) and takes all responsibilities arising from the use and management of the domain name, and undertakes to inform the Registrar or, in subordinate to the Registry, of any changes of in his/her/their data as outlined in the Rules for assignment of the ccTLD.it and in the Guidelines (http://www.nic.it).

Sect. 3 - Declarations and assumptions of responsibility

The Registrant of the domain name in question, declares under their own responsibility that they are:

a)   *in possession of the citizenship or resident in a country of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation (in the case of registration for natural persons);*

b)   *established in a country of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation (in the case of registration for other organizations);*

c)   *aware and accept that the registration and management of a domain name is subject to the "Rules of assignment and management of domain names in ccTLD. it" and "Regulations for the resolution of disputes in the ccTLD.it" and their subsequent amendments;*

d)   *entitled to the use and/or legal availability of the domain name applied for, and that they do not prejudice, with the request for registration, the rights of others;*

e)   *aware that for the inclusion of personal data in the Database of assigned domain names, and their possible dissemination and accessibility via the Internet, consent must be given explicitly by ticking the appropriate boxes in the information below. See "The policy of the .it Registry in the Whois Database" on the website of the Registry (http://www.nic.it);*

f)   *aware and agree that in the case of erroneous or false declarations in this request, the Registry shall immediately revoke the domain name, or proceed with other legal actions. In such case the revocation shall not in any way give rise to claims against the Registry;*

g)   *release the Registry from any responsibility resulting from the assignment and use of the domain name by the natural person that has made the request;*

h)   *accept Italian jurisdiction and laws of the Italian State.*

☐   YES accept   ☐   NO do not accept

Sect. 4 - Information and acquisition of consent for the processing of data for the registration of the domain name and for visibility on the Internet

Information pursuant to arts. 13 and 14 of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data

To carry out activities to which the present disclosure relates:

a)   *the holder of the treatment of data is the Italian National Research Council, through the Institute of Informatics and Telematics of the CNR,.it Registry (http://www.nic.it);*

b)   *the Registrar is responsible for processing the data and manages contractual relations with the Registrant, the identification data are contained in the contract between the said Registrar and the Registrant, and therefore known by the party concerned. A list of those responsible for processing data is available on the website of the Registry (http://www.nic.it). The Registrar is the holder of the treatment of data with regard to contractual relations directly with the Registrant, not included in this disclosure;*

c)   *the Data Protection Officer - DPO - for the Registro.it – IIT-CNR, is Mr. Giuliano Salberini (rdp@cnr.it);*

d)   *the Data Protection Officer - DPO - for the Registrar is: <indicate identity and contact>, where it exists, or a contact person indicated by the Registrar;*

e)   *the mandatory information is that information that is essential in order for the service requested to be provided.*

The Registrant's personal data are collected by the Registrar who manages contractual relations with the Registrant using this form, in order to register and manage the domain name in the Data Base of Assigned Names at the Institute of Information and Telematics of the CNR, .it Registry.

Additional requirements of information about use of personal data:

a) *Purpose of data collection. The Registrant's personal data are collected by the Registrar for registering and managing the domain name in the database of domain names assigned to the Institute of Informatics and Telematics IIT-Registro.*

b) *Methods of data collection and processing. The data treatment is carried out by our authorized personnel, using automated tools in compliance with current legislation and in accordance with the principles of correctness, lawfulness, transparency, and for the protection of your privacy and your rights, for the time strictly necessary for use of the service. Our information system is structured in such a way as to prevent data loss, illicit or incorrect use and unauthorized access.*

c) *Consequences in case of refusal. The information collected will be processed for the purposes of administrative and accounting management, protection of rights, and other purposes related to the registration, management, contestation, transfer and cancellation of the domain name, as well as to comply with legal obligations, regulations or EU legislation. It is communicated to third parties for ancillary or necessary activities related to the aforementioned purposes. The collection of personal data supplied by you is necessary for the implementation of the service offered. Failure or partial provision of the requested personal data makes the service not deliverable. The Whois service does not allow the display of any data relating to the contacts of a domain name (registrant, admin and tech) if the domain name itself has been registered by an individual and consent to data publication has not been given (consentForPublishing field set to "false"). The consent to the diffusion and accessibility of personal data is not provided in those cases where data must be disclosed in order to comply with legal obligations. In Accordance with Art. 40, paragraph 2, letter b) of Decree-Law 6 December 2011, no. 201, converted, with amendments, by Law of 22 December 2011, no. 214, legal persons, entities or associations are no longer eligible to receive data handling information or any request for consent previously required under Regulation (EU) 2016/679. Natural persons whose data is processed in connection with the activities related to this contract continue to have the right, even if provided for such purposes by people who are no longer eligible, under the terms of the duties of the aforesaid persons of informing and obtaining consent to this data processing policy.*

d) *Subjects to whom data can be communicated. Your data will be communicated to the IIT-Registro in order to carry out the contract and the related administrative and accounting activities. The data communicated will be only those strictly necessary for the purpose of the requested service. The data will not be used and communicated to third parties for marketing or direct marketing. Your data will not be disclosed to third parties in any way whatsoever without your prior and specific consent, but may be made available to the Judicial Authorities, if requested.*

e) *Transfer of personal data to third party countries or international organizations. Your data may be transferred to third party countries outside the EU, in compliance with current legislation.*

f) *Personal data retention period. Your personal data will be kept for the time considered useful for the carrying out of the requested service or for the management of subsequent administrative and accounting activities.*

g) *Registrant rights and revocation of consent given:*

- *Right of access (Article 15 - EU Reg. 2016/679): the right of access gives the right to receive a copy of the personal data being processed. This includes the expected retention period or, if this is not possible, the criteria used to define this period, as well as the*

guarantees applied in case of transfer of data to third party countries.

- *Right to data portability (art. 20 - Reg. UE 2016/679): The Registrant has the right to request at any time that their data be transferred from one Registrar to another through automated procedures.*

- *If you believe that your data have been processed illegitimately, you have the right to contact the Supervisory Authority to register a complaint.*

- *At any time the Registrant may also revoke the consent given as specified in this circular. In these cases, the service offered will no longer be available.*

These rights may be exercised by request to the Registrar who manages the contractual relationship with the Registrant and subordinate to the Institute of Informatics and Telematics of CNR, Via Giuseppe Moruzzi, 1, I-56124 Pisa, Italy.

Sec. 5 - Consent to the processing of personal data for registration

The interested party, after reading the above disclosure, gives consent to the processing of information required for registration, as defined in the above disclosure.

Giving consent is optional, but if no consent is given, it will not be possible to finalize the registration, assignment and management of the domain name.

☐   YES accept   ☐   NO do not accept

Sec. 6 - Consent to the processing of personal data for diffusion and accessibility via the Internet

The interested party, after reading the above disclosure, gives consent to the dissemination and accessibility via the Internet, as defined in the disclosure above.

Giving consent is optional, but absence of consent does not allow the dissemination and accessibility of Internet data.

☐   YES accept   ☐   NO do not accept

Sec. 7 - Consent to the transfer of personal data to third party countries

The interested party, after reading the above information, gives consent to personal data transfers to a third party country outside the EU, in compliance with current legislation.

The provision of data is optional, but if no consent is given, it will not be possible to complete the registration, assignment and management of the domain name.

☐   YES accept   ☐   NO do not accept

Sec. 8 - Explicit Acceptance of the following points

For explicit acceptance, the interested party declares that they:

a) *are aware and agree that the registration and management of a domain name is subject to the "Rules of assignment and management of domain names in ccTLD.it" and "Regulations for the resolution of disputes in the ccTLD .it" and their subsequent amendments;*

b) *are aware and agree that in the case of erroneous or false declarations in this request, the Registry shall immediately revoke the domain name, or proceed with other legal actions. In such case the revocation shall not in any way give rise to claims against the Registry;*

c) *release the Registry from any responsibility resulting from the assignment and use of the domain name by the natural person that has made the request;*

d) *accept the Italian jurisdiction and laws of the Italian State.*

☐   **YES accept**   ☐   **NO do not accept**

3.2   Simple change

Simple changes are carried out using the EPP Update command, the Registrar submits a request to Update Contact or Update Domain, depending on the object to update.

With a simple change, the Registrar can only update certain fields of a contact or domain in the Registry Database. The Registrar may change the authoritative nameservers and the AuthInfo (i.e. the password for the authorization of the request for specific transactions) of a domain name, its administrative and technical contacts, and information associated with them.

Transactions classified as "simple change" are not charged to the Registrar and can be requested by a suspended Registrar as well.

3.2.1   Simple change to registered contact

Simple changes regarding a registered contact in the Registry Database are done by using Update Contact. This command allows the Registrar to perform the following steps:

- Addition or removal of a status

- Addition or change of the following fields:
  - PostalInfo organized as follows:
    - Name
    - Organization
    - Address structure:
      - Street/Square 1
      - Street/Square 2
      - Street/Square 3
      - City
      - Province
      - ZIP code (postcode)
      - Country
  - Phone
  - Fax
  - Email
  - ConsentForPublishing
  - Registrant data (if the contact is not already a Registrant)
    - Nationality (nationalityCode)

- EntityType
- RegCode

To identify the contact on which to perform the requested transaction, the Registrar uses the ID of the contact, which is mandatory.

The policies adopted by the Registry do not allow data regarding the Registrant extension to be changed (either individually or all together) once they have been set. The Registrar has two ways to set the information of its Registrant:

- when registering the contact with a Create Contact. In this way the contact is registered as a potential Registrant of one or more domain names;

- with a change after the registration, via an Update Contact. In this way the contact, who was initially registered as a technical contact (tech) and/or administrative (admin), can then be associated as a Registrant of one or more domain names.

3.2.1.1 Validation steps for the simple change of a registered contact

The system verifies that the request to Update Contact is compatible with:

- the constraints present in the XML Schema *epp-1.0.xsd, eppcom-1.0.xsd, contact-1.0.xsd, extcon-1.0.xsd* (see Appendix A - The EPP protocol);

- the following additional restrictions:
  - the contact with the ID specified must be present in the Registry Database;
  - restrictions must apply on the values and the minimum and maximum cardinality of the fields given for Create Contact;
  - the current status of the contact must not be serverUpdateProhibited or clientUpdateProhibited;
  - statuses that can be added must only be those that begin with the prefix "client";
  - the list of statuses by adding or removing statuses must not contain duplicates;
  - a status already associated with the contact cannot be added;
  - a status not associated with the contact cannot be removed;
  - the new value of the Email field must be in the format defined by RFC 2822 and subsequent modifications. Moreover, if on the right of "@" character there are non-ASCII characters (see Section 2.2), it must be specified in Punycode format (e.g.: "postmaster@xn--citt-3na.it" and not "postmaster@città.it");
  - if the contact is a Registrant (fields of Registrant data section filled):
    - the Name field is changeable only if the Registrant is other than a natural person (i.e., EntityType <> 1);
    - the Country field is changeable only if the Registrant is a natural person (i.e., EntityType = 1);
    - the Organization field, if initially empty, must be completed if the Registrant is a natural person (i.e., EntityType = 1) the value of the field organization must be the same as the field Name;
    - the Organization field, once set, is no longer changeable;
    - the Nation, Nationality, EntityType and RegCode fields, if empty, must be filled in;
    - the Nationality, EntityType and RegCode fields, once set, are no longer changeable (individually or all together).

3.2.1.2 Examples of an Update Contact request

Example 1

Update Contact for changing phone number and email address, and for the addition of the clientDeleteProhibited to prevent the cancellation of the contact:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
```

```
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
   <command>
     <update>
       <contact:update
         xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
         xsi:schemaLocation="urn:ietf:params:xml:ns:contact-1.0
contact-1.0.xsd">
           <contact:id>mr0001</contact:id>
           <contact:add>
              <contact:status s="clientDeleteProhibited"/>
           </contact:add>
           <contact:chg>
              <contact:voice>+39.05863152111</contact:voice>
              <contact:email>info@example.it</contact:email>
           </contact:chg>
       </contact:update>
     </update>
     <clTRID>ABC-12345</clTRID>
   </command>
 </epp>
```

Example 2
Update Contact to change the data relating to consent for publication of personal data:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <update>
      <contact:update
        xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
        xsi:schemaLocation="urn:ietf:params:xml:ns:contact-1.0 contact-
1.0.xsd">
          <contact:id>mm001</contact:id>
           <contact:chg>
           </contact:chg>
      </contact:update>
    </update>
    <extension>
      <extcon:update
        xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
        xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extcon-1.0
extcon-1.0.xsd">
        <extcon:consentForPublishing>false</extcon:consentForPublishing>
      </extcon:update>
    </extension>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

3.2.1.3   Examples of responses to an Update Contact request

Example 1
Response to a successful Update Contact:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
```

```
xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
xmlns="urn:ietf:params:xml:ns:epp-1.0">
<response>
    <result code="1000">
       <msg lang="en">Command completed successfully</msg>
    </result>
    <trID>
        <clTRID>ABC-12345</clTRID>
        <svTRID>31bc0bcb-527b-459f-a7d7-92594f8e9cde</svTRID>
    </trID>
  </response>
 </epp>
```

Example 2

Response to a failed Update Contact. The error is due to the fact that the contact cannot be changed because it is in clientUpdateProhibited. The only change permitted is the removal of the said constraint.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
   <result code="2304">
     <msg lang="en">Object status prohibits operation</msg>
     <extValue>
       <value>
          <extepp:reasonCode>8008</extepp:reasonCode>
       </value>
    <reason lang="en">Contact has status clientUpdateProhibited</reason>
   </extValue>
   </result>
   <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>a01bcd54-2142-42be-b446-9114add5d966</svTRID>
   </trID>
  </response>
</epp>
```

3.2.1.4 Effects of Contact Update

If the Update Contact requested by the Registrar is executed successfully and passes the validation steps described in Section 3.2.1.1, the contact in the Registry Database is changed as requested. The following contact fields are also updated:

- the Organization field, if empty, is forced to the value of the Name field when the request was a change to set the fields in the Registrant data section and the Registrant is a natural person (i.e., EntityType = 1);

- date of last change;

- the client ID that performed the last change;

- the status of the contact remains unchanged unless the addition or removal of the member of the contact is requested.

3.2.2   Simple change of a registered domain name

The simple change of a domain name registered in the Registry Database is carried out through the use of Update Domain. This command allows the Registrar of the domain name to do the following:

- add and/or remove host (complete IP addresses for subordinate host);

- change of the contact-type admin;

- add and/or remove contact-type tech;

- add and/or remove statuses;

- change of the AuthInfo associated with the domain name.

The Update Domain command is also used for the modification or the removal of the *Delegation Signer* (DS) records associated with a digitally signed domain name by a "DNSSEC accredited" Registrar (see Section 5.6).

To identify the domain name on which to perform the requested transaction, the Registrar uses the Name field that is mandatory.
If the transaction is required to change the AuthInfo associated with the domain name, the Registrar must notify the Registrant about the new value.
In compliance with the policies adopted by the Registry, the Registrar cannot send an Update Domain command that contains simultaneously more than one of the following operations:

- change of the Registrant;

- change of hosts or of DS records associated with the domain name;

- change of the status;

- recovery of a deleted domain name (see Section 3.7.4).

However, it is possible to make a change that affects the tech/admin contacts or the AuthInfo at the same time as one of the changes listed above.
In all the changes of hosts associated with the domain name requiring the removal of a host, it is enough to simply return the name to be removed (in section <rem> of the command) without any IP address associated with it.
In all the changes of hosts associated with the domain name requiring the addition of a host, it is enough to simply return the name to be added (in section <add> of the command), together with its possible IP addresses for a subordinate host to the domain name.
The change of the IP addresses of a subordinate host, however, always takes place as the addition of the host with the new IP addresses (in section <add> of the command) and the simultaneous removal of the host for which the change in IP addresses has been requested (in section <rem> of the command) without reporting the IP addresses currently associated with it and currently in the Registry Database (see example 3 in Section 3.2.2.2).
In order to change the hosts associated with a domain name that is in inactive/*dnsHold* (or inactive/*dnsHold/autoRenewPeriod*) status, since the domain name does not have a validated configuration yet, the Registrar has to send an Update Domain command containing only the <add> section with the entire new DNS configuration (see example 4 in Section 3.2.2.2).

In order to change the hosts associated with a domain name that is, on the contrary, in ok (or ok/*autoRenewPeriod*) or pendingUpdate (or pendingUpdate/*autoRenewPeriod*) status, since the domain name has a configuration that is already validated, the Registrar has to send an Update Domain command in which the <add> section contains the hosts to add as to the current validated DNS configuration of the domain name (with the IP addresses for the host subordinate to the domain name). The <rem> section, instead, will contain the hosts that must be removed from the validated DNS configuration (without specifying the IP addresses of the subordinate hosts to the domain name - see example 5 in Section 3.2.2.2).

If the Registrant contact (registrant) of the domain name for which an Update Domain has been requested does not contain all the mandatory fields, the change fails, apart from the change of status. This situation may occur, for example, for registrant contacts created in the old "asynchronous" registration system and migrated to the new "synchronous" registration system.

In the event that the Update Domain does not require changes to hosts or requires changes to other fields as well as the host, validation steps are executed on these fields. If the validation steps are unsuccessful, the Registrar receives a negative response and the change is rejected (see examples 5 and 6 in Section 3.2.2.3), so the domain name does not change its status.

If the validation steps have been successful and the changes do not affect the host, the Registrar gets a response that the transaction has been completed successfully, and the changes are reflected immediately in the Registry Database (see examples 1, 2 and 3 in Section 3.2.2.3). The domain name only changes its status if a request has been made to change the status of the domain name itself.

If the validation steps have been successful but the changes affect the host as well, the Registrar gets a response that the transaction was successful but not completely finished (see example 4 in Section 3.2.2.3). The domain name then goes into **pendingUpdate** for a maximum of 5 (five) days. In this period, the server performs the validation of the DNS (see Section 3.1.2.6).

If the DNS check is positive, the changes to the host associated with the domain name appear in the Database and the server will insert into the polling queue a message indicating the successful completion of the change request.

If the DNS check is negative, the server will insert into the polling queue a message that notifies the Registrar of the error found in the new DNS configuration proposal, and the changes to the host associated with the domain name requests are not reported in the Database.

On expiry of the 5 (five) days, the server will insert into the polling queue a message that notifies the Registrar of the expiry of the pendingUpdate period. Thus the change of hosts is not made to the Database and the domain name is put back into its previous status with the old configuration.

During pendingUpdate, the Registrar may change hosts, Registrant and the contacts associated with the domain name and this will mean that the information regarding the old amendment will be replaced with new information but the period of 5 (five) days pendingUpdate status will not begin again.

During the pendingUpdate phase, the Registrar may interrupt the change of hosts operation and reset immediately the domain name status prior to the above mentioned operation without, therefore, waiting for the 5 (five) days provided for pendingUpdate status. In this case, the Registrar will have to send an Update Domain command in which the <add> section contains all the hosts of the last validated DNS configuration accompanied by the IP addresses but only for the hosts subordinate to the domain name. The <rem>, section on the contrary, will contain all the hosts of the last validated DNS configuration without the IP addresses of the hosts subordinated to the domain name (see example 6 in Section 3.2.2.2).

The following diagram shows the various stages that make up the procedure to change the registration of a domain name:
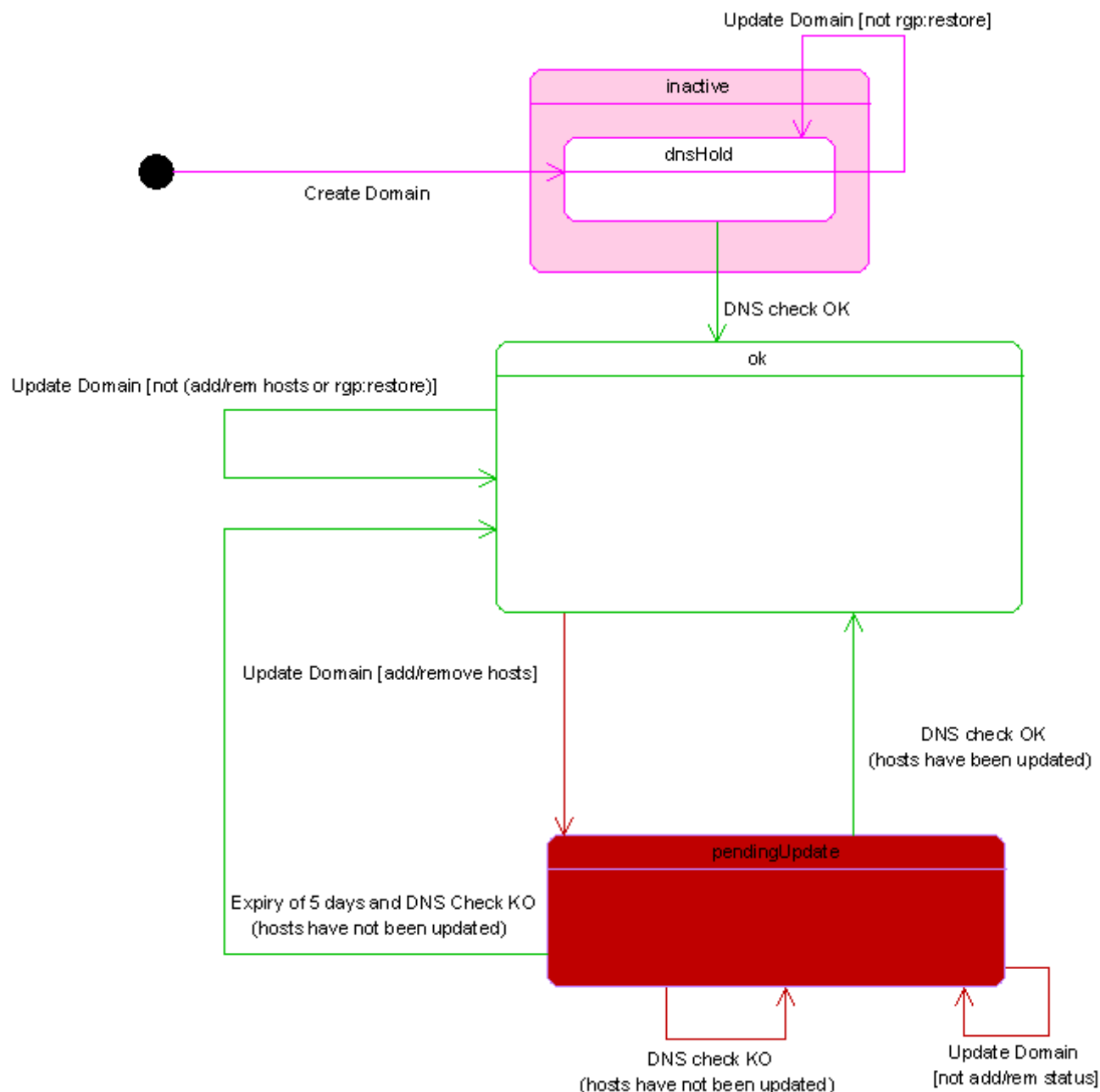
3.2.2.1   Validation steps for the simple change of a registered domain name

The system verifies that the request for Domain Update is compatible with:

- the constraints present in the XML Schema *epp-1.0.xsd*, *eppcom-1.0.xsd*, *domain-1.0.xsd*, *host-1.0.xsd* (see Appendix A - The EPP protocol);

- the following additional restrictions:
  - o the domain name for which the transaction is requested must be present in the Registry Database;
  - o restrictions must apply on the values and the minimum and maximum cardinality of the

fields given controlling Create Domain;

- o the domain name for which the transaction was requested must not be in one of the following statuses: pendingTransfer, pendingTransfer/*bulk*, pendingDelete/*pendingDelete*, serverUpdateProhibited, inactive/*serverHold*, inactive/*revoked*, inactive/*toBeReassigned*, ok/*noRegistrar*, inactive/*dnsHold*/*noRegistrar*, inactive/*noRegistrar*;
- o if the domain name for which the transaction was requested is in clientUpdateProhibited or inactive/*clientHold*, the Registrar can only remove that status;
- o if the domain name for which the transaction was requested is in inactive/*dnsHold*, the Registrar may submit a new DNS configuration inserting only (in the <add> section of the command) the whole list of hosts to be validated. The <rem> section therefore will not have to be inserted;
- o if the domain name for which the transaction was requested is in pendingUpdate, the Registrar cannot add or remove any constraint;
- o if the domain name for which the transaction was requested is in pendingDelete/*redemptionPeriod*, the Registrar may only send either a Domain Update with ext = restore request (see Section 3.7.4) or a Domain Update request for the addition or the removal of clientTransferProhibited and/or clientUpdatedProhibited constraints;
- o the list of statuses by adding or removing statuses cannot contain duplicates;
- o a status already associated with the domain name cannot be added;
- o a status not associated with the domain name cannot be removed;
- o contacts to add or remove with the IDs specified must be in the Registry Database;
- o contacts to add or remove the domain name must have been registered by the same Registrar that submits the request for the change of the domain name;
- o the contact list to add or remove must not contain the same two contacts with the same role;
- o a contact already associated with the domain name cannot be added with the same role;
- o the number of admin and technical contacts must comply with the table in Section 6.11 ;
- o a contact that is not associated with the domain name cannot be removed;
- o the host list must not contain two hosts with the same IP addresses or with the same name;
- o the number of hosts to associate with the domain name must comply with the table in Section 6.11 ;
- o a host already associated with the domain name cannot be added;
- o a host that is not associated with the domain name cannot be removed;
- o if the Registrant is a natural person (EntityType = 1), the administrative contact cannot be changed;
- o the new AuthInfo, if specified in the request, must differ from that stored for the domain name for which the transaction was requested;
- o the new AuthInfo, if specified in the request, must have a minimum length of 8 characters and maximum of 32 characters;
- o more than one of the following cannot be carried out at the same time:
  - ▪ change of hosts associated with the domain name
  - ▪ change of the Registrant
  - ▪ change of the status
  - ▪ recovery of a domain name (see Section 3.7.4)

3.2.2.2 Examples of Update Domain requests

Example 1

Domain Update command for the change of hosts associated with the domain name, the addition of a technical contact and the clientDeleteProhibited status to prevent the cancellation of the domain name itself:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
```

```
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <update>
     <domain:update
      xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
      xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
      <domain:name>example.it</domain:name>
      <domain:add>
       <domain:ns>
         <domain:hostAttr>
           <domain:hostName>ns3.example.it</domain:hostName>
           <domain:hostAddr ip="v4">193.205.245.7</domain:hostAddr>
         </domain:hostAttr>
       </domain:ns>
       <domain:contact type="tech">mak21</domain:contact>
       <domain:status s="clientDeleteProhibited">
       </domain:status>
      </domain:add>
      <domain:rem>
         <domain:ns>
           <domain:hostAttr>
              <domain:hostName>ns1.example.it</domain:hostName>
           </domain:hostAttr>
         </domain:ns>
      </domain:rem>
     </domain:update>
    </update>
    <clTRID>ABC-12345</clTRID>
  </command>
 </epp>
```

Example 2

Update Domain to replace one of the nameservers associated with the domain name (ns1.example.it) with a new one (ns4.example.it):

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <update>
      <domain:update
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>example.it</domain:name>
        <domain:add>
         <domain:ns>
          <domain:hostAttr>
           <domain:hostName>ns4.example.it</domain:hostName>
           <domain:hostAddr ip="v4">193.205.245.9</domain:hostAddr>
          </domain:hostAttr>
         </domain:ns>
        </domain:add>
         <domain:rem>
          <domain:ns>
```

```
              <domain:hostAttr>
                <domain:hostName>ns1.example.it</domain:hostName>
              </domain:hostAttr>
            </domain:ns>
          </domain:rem>
        </domain:update>
      </update>
      <clTRID>ABC-12345</clTRID>
    </command>
</epp>
```

Example 3

Update Domain for the change of the IP address of one of the authoritative nameservers (ns3.example.it) associated with the domain name. This type of transaction is implemented by adding the nameserver for which the IP address change has been requested (ns3.example.it) by inserting also its new IP address as well as the name of the nameserver (see Section 3.2.2) and the removal of the same nameserver (ns3.example.it) whose IP address must be changed:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <update>
      <domain:update
        xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
        xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>example.it</domain:name>
        <domain:add>
          <domain:ns>
            <domain:hostAttr>
             <domain:hostName>ns3.example.it</domain:hostName>
             <domain:hostAddr ip="v4">193.205.245.8</domain:hostAddr>
            </domain:hostAttr>
          </domain:ns>
        </domain:add>
       <domain:rem>
        <domain:ns>
            <domain:hostAttr>
                <domain:hostName>ns3.example.it</domain:hostName>
            </domain:hostAttr>
        </domain:ns>
       </domain:rem>
      </domain:update>
    </update>
     <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

Example 4

Change of hosts of a domain name in inactive/*dnsHold* status (see Section 3.2.2): it is assumed that the last configuration submitted to the DNS validation is ns1.example.com and ns2.example.com and the Registrar wants to change it in ns1.example.com and ns3.example.com. In this case the Registrar has to send an Update Domain command containing only the <add> section with the entire list of nameservers that must be associated with the domain name, as follows:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
 <command>
  <update>
   <domain:update
    xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
    xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-1.0.xsd">
    <domain:name>example.it</domain:name>
      <domain:add>
    <domain:ns>
      <domain:hostAttr>
        <domain:hostName>ns1.example.com</domain:hostName>
      </domain:hostAttr>
       <domain:hostAttr>
        <domain:hostName>ns3.example.com</domain:hostName>
      </domain:hostAttr>
    </domain:ns>
      </domain:add>
   </domain:update>
  </update>
  <clTRID>ABC-12345</clTRID>
 </command>
</epp>
```

If the new configuration contains host that are subordinate to the domain name, it is necessary to specify the IP address, for each of them, as in the example below:

```
      <domain:hostAttr>
        <domain:hostName>ns3.example.it</domain:hostName>
        < domain:hostAddr ip="v4">193.205.245.8</domain:hostAddr >
      </domain:hostAttr>
```

Example 5
Change of hosts of a domain name in pendingUpdate or ok status (see Section 3.2.2): it is assumed that the last validated DNS configuration, that is the one that is currently in the Registry Database, is ns1.example.com and ns2.example.com and the Registrar wants to replace the nameserver ns1.example.com with the subordinate nameserver to the domain name ns1.example.it. The Update Domain command that the Registrar will have to send is the following:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
 <command>
  <update>
   <domain:update
    xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
    xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-1.0.xsd">
    <domain:name>example.it</domain:name>
      <domain:add>
    <domain:ns>
```

```
        <domain:hostAttr>
          <domain:hostName>ns1.example.it</domain:hostName>
          <domain:hostAddr ip="v4">193.205.245.6</domain:hostAddr>
        </domain:hostAttr>
      </domain:ns>
     </domain:add>
    <domain:rem>
    <domain:ns>
        <domain:hostAttr>
          <domain:hostName>ns1.example.com</domain:hostName>
        </domain:hostAttr>
      </domain:ns>
     </domain:rem>
    </domain:update>
  </update>
  <clTRID>ABC-12345</clTRID>
 </command>
</epp>
```

Example 6
Change of hosts of a domain name in pendingUpdate status in order to put the domain name again
in ok status and with the old configuration (see Section 3.2.2): it is assumed that the last validated
DNS configuration, that is the one that is currently in the Registry Database, is ns1.example.com
and ns2.example.com and a validation process of a new DNS configuration whose result is
negative is being carried out. In order to put again the domain name in ok status with the current
DNS configuration without waiting for the 5 (five) days provided for pendingUpdate status, the
Update Domain command to be sent is the following:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
 <command>
  <update>
   <domain:update
    xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
    xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-1.0.xsd">
    <domain:name>example.it</domain:name>
      <domain:add>
    <domain:ns>
        <domain:hostAttr>
          <domain:hostName>ns1.example.com</domain:hostName>
        </domain:hostAttr>
        <domain:hostAttr>
          <domain:hostName>ns2.example.com</domain:hostName>
        </domain:hostAttr>
      </domain:ns>
     </domain:add>
    <domain:rem>
    <domain:ns>
        <domain:hostAttr>
          <domain:hostName>ns1.example.com</domain:hostName>
        </domain:hostAttr>
        <domain:hostAttr>
```

```
          <domain:hostName>ns2.example.com</domain:hostName>
        </domain:hostAttr>
      </domain:ns>
        </domain:rem>
      </domain:update>
    </update>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

If the new configuration contains hosts subordinate to the domain name, it is necessary, for each of them, to specify the IP address but only in the <add> section, as in the example below showed:

```
    <domain:hostAttr>
      <domain:hostName>ns3.example.it</domain:hostName>
      < domain:hostAddr ip="v4">193.205.245.8</domain:hostAddr >
    </domain:hostAttr>
```

3.2.2.3 Examples of responses to an Update Domain request

Example 1

Response to successful Update Domain:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
        <msg lang="en">Command completed successfully</msg>
    </result>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>8b51e1e8-5178-442b-a55e-6bc8990493ea</svTRID>
    </trID>
  </response>
</epp>
```

Example 2

Response to successful Update Domain for the addition of the clientUpdateProhibited status:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
```

```
      <msg lang="en">Command completed successfully</msg>
    </result>
    <extension>
      <extdom:chgStatusMsgData >
        <extdom:name>esempio.it</extdom:name>
         <extdom:targetStatus>
          <domain:status lang="en"
              s="clientUpdateProhibited"/>
         </extdom:targetStatus>
      </extdom:chgStatusMsgData>
    </extension>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>7f356d29-2b83-4aed-b627-e341672ef6a9</svTRID>
    </trID>
  </response>
</epp>
```

Example 3

Response to a successful Update Domain for the addition of the *clientHold* status:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
     <result code="1000">
       <msg lang="en">Command completed successfully</msg>
     </result>
     <extension>
       <extdom:chgStatusMsgData>
         <extdom:name>esempio.it</extdom:name>
         <extdom:targetStatus>
          <domain:status lang="en" s="inactive"/>
          <domain:status lang="en" s="clientHold"/>
         </extdom:targetStatus>
       </extdom:chgStatusMsgData>
     </extension>
     <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>e248879c-9107-4bdc-81ef7a95365e22c7</svTRID>
     </trID>
  </response>
</epp>
```

Example 4

Response to a successful Update Domain for the change of the hosts associated with the domain
"example.it". The domain name goes into pendingUpdate while waiting for DNS validation.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
```

```
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
 <response>
   <result code="1000">
     <msg lang="en">Command completed successfully</msg>
   </result>
   <extension>
      <extdom:chgStatusMsgData>
        <extdom:name>example.it</extdom:name>
         <extdom:targetStatus>
           <domain:status lang="en" s="pendingUpdate"/>
         </extdom:targetStatus>
      </extdom:chgStatusMsgData>
   </extension>
   <trID>
     <clTRID>ABC-12345</clTRID>
     <svTRID>b15d5ec6-779a-4619-925ae7d10df167d4</svTRID>
   </trID>
 </response>
</epp>
```

Example 5

Response to a failed Update Domain. The error is due to the fact that the domain name cannot be changed because it is in cleintUpdateProhibited status. The only permitted change is the removal of the said constraint.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="2304">
       <msg lang="en">Object status prohibits operation</msg>
       <extValue>
         <value>
            <extepp:reasonCode>9026</extepp:reasonCode>
         </value>
       <reason lang="en">Domain has status
clientUpdateProhibited</reason>
       </extValue>
    </result>
    <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>5d138ab4-92db-43a0-a6d7-3ccedf017b7d</svTRID>
    </trID>
  </response>
</epp>
```

Example 6

Response to a failed Update Domain. The error is due to the fact that the tech contact indicated in the request is not in the Registry Database.

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
 <response>
  <result code="2004">
    <msg lang="en">Parameter value range error</msg>
   <value>
    <extepp:wrongValue>
      <extepp:element>contact</extepp:element>
    <extepp:namespace>urn:ietf:params:xml:ns:domain-1.0</extepp:namespace>
      <extepp:value>TECH25</extepp:value>
    </extepp:wrongValue>
   </value>
   <extValue>
    <value>
      <extepp:reasonCode>9003</extepp:reasonCode>
    </value>
    <reason lang="en">Contact does not exist</reason>
   </extValue>
  </result>
  <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>0c2c30ad-3e70-47f8-927f-9d10d72d6755</svTRID>
  </trID>
 </response>
</epp>
```

3.2.2.4 Effects of Domain Update for simple change

If the Update Domain command submitted by the Registrar is executed successfully and passes the validation steps described in Section 3.2.2.1, the registration of the domain name in the Registry Database is changed in accordance with the changes requested. The following fields of the domain are also updated:

- date of last change;

- the client ID that performed the last change;

- the status of the domain name remains unchanged unless the addition or removal of the statuses of the domain name is requested.

3.3 Change of Registrant

The change of Registrant allows the Registrar to change the assignee of the domain name at the request of the new Registrant. To achieve this type of transaction, the old Registrant has to inform the new Registrant regarding the value of the AuthInfo associated with the domain name. At the same time as the change of the Registrant, the Registrar will provide new AuthInfo which is different from that currently associated with the domain name.

The change in the Registrant is made by using EPP Update Domain.

3.3.1   Validation steps for the change of Registrant

The system verifies that the request for Domain Update is compatible with:

- the constraints present in the XML Schema *epp-1.0.xsd, eppcom-1.0.xsd, domain-1.0.xsd* (see Appendix A - The EPP protocol);

- the following additional restrictions:
  - the Registrar that has sent the request must not be suspended;
  - the domain name for which the transaction was requested must be present in the Registry Database;
  - the domain name for which the transaction was requested must not be in the status pendingTransfer, pendingTransfer/*bulk*, pendingDelete/*pendingDelete*, pendingDelete/*redemptionPeriod*, inactive/*clientHold*, inactive/*serverHold*, clientUpdateProhibited, serverUpdateProhibited, inactive/*revoked*, inactive/*toBeReassigned*. If the domain name is in the status ok/*noRegistrar*, inactive/*dnsHold*/*noRegistrar* or inactive/*noRegistrar* the change of Registrant is allowed only if it is associated with the change of Registrar (see Section 3.5);
  - the new Registrant with the specified ID must be a contact in the Registry Database with all the compulsory data and the section related to the Registrant data;
  - the new AuthInfo specified in the request must differ from the one associated with the domain name for which the transaction was requested;
  - the new AuthInfo specified in the request must have a minimum length of 8 characters and maximum of 32 characters.

3.3.2   Example Update Domain request for the change of Registrant

```xml
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
   <update>
    <domain:update
     xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
     xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>example.it</domain:name>
            <domain:chg>
            <domain:registrant>mr002</domain:registrant>
            <domain:authInfo>
                <domain:pw>NEW2BARfoo</domain:pw>
            </domain:authInfo>
          </domain:chg>
      </domain:update>
    </update>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

3.3.3   Effects of the Update Domain for the change of Registrant

If the Update Domain command for changing the Registrant requested by the Registrar is executed successfully and passes the validation steps described in Section 3.3.1, the domain object is changed and it is associated with the new Registrant and the new AuthInfo.

If the new Registrant is a natural person (EntityType = 1) and no new administrative contact is specified in the request, the system automatically changes it by entering the ID associated with the new Registrant.

The Registry sends an email to the new and the old Registrant in the following formats:

Mail for the new Registrant:

Subject: 10300 - New registration of the domain name <name of the domain>

We inform you that on <registration date> the domain name <name of the domain> has been registered through the Registrar < Registrar>.

The outcome of the registration is:

Registrant:
Address:
Country:
Nationality (for natural persons only):
Phone:
Fax:
RegCode:
Email:
EntityType:

The domain name <name of the domain> has been put in <status> status.

The Registrant, has made the following choice concerning consent:

- consent for personal data treatment for the registration: YES

- consent for personal data treatment for diffusion and accessibility via the Internet: <YES/NO (value of consentForPublishing)>

and has made the following declarations and has accepted the following clauses:

- to be citizen or resident in a country of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation (registration for natural person);

- to have the registered office based in a country of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation (registration for subjects other than natural persons);

- to be aware of and to accept that the registration and management of a domain name are subject to the "Rules of assignment and management of domain names in the ccTLD .it" and the "Regulations for the Resolution of Disputes in the ccTLD .it" and subsequent modifications;

- to have right of use and/or legal availability of the registered domain name requested and not to prejudice, with this registration request, the rights of third parties;

- to be aware that in order to fulfill personal data on the database of assigned names, and for their possible diffusion and accessibility on Internet, it is necessary to give express consent checking the relevant boxes on the basis of the information below. On the Registry website (http://www.nic.it) the document "The policy of the .it Registry about the Whois database" is available;

- to be aware of and to accept that in the case of erroneous or false declaration in the present request, the Registry will proceed to the immediate revocation of the domain name, reserving the right to take out further legal action. In this case the revocation cannot give rise in any way whatsoever to requests for damages to the Registry;

- to release the Registry from any responsibility deriving from assignment and use of the

domain name on the part of the requesting natural person;

- to accept Italian jurisdiction and the laws of the Italian State.

We inform you that the Registrar mentioned above is responsible for personal data treatment and that the CNR, through the Institute of Informatics and Telematics, is the holder.
As specified in the registration form, the data will be released to third parties for the activation of opposition and for the defense of rights as well as the fulfillment of obligations of law or regulation.
Should you need further information, please contact the Registrar indicated in the registration and whose data are also available on the website of the Registry http://www.nic.it.

Best regards,

Registro .it
Istituto di Informatica e Telematica
CNR - AREA DELLA RICERCA
Via Giuseppe Moruzzi, 1 - I-56124 PISA
Tel: +39 050 3139811
Fax: +39 050 3152713 (External Relations)
Email: hostmaster@nic.it

Mail to the former Registrant:

Subject: 10301 - Modification of the Registrant for the domain name <name of the domain>

We inform you that an operation of modification of the Registrant for the domain name <name of the domain> was made on <date of the operation>. Therefore <former Registrant> is no longer the Registrant of the domain name in object.

Best regards,

Registro .it
Istituto di Informatica e Telematica
CNR - AREA DELLA RICERCA
Via Giuseppe Moruzzi, 1 - I-56124 PISA
Tel: +39 050 3139811
Fax: +39 050 3152713 (External Relations)
Email: hostmaster@nic.it

3.4   Change of Registrar

The change of Registrar means that a domain name can be transferred from the current Registrar to another Registrar.
The request to change the Registrar is made by the new Registrar, on behalf of the Registrant, using EPP Transfer Domain with the attribute op = "request".
To achieve this, the Registrant must first notify the new Registrar regarding the AuthInfo currently associated with the domain name, so that the new Registrar can insert it in the request to change the Registrar (see Section 3.4.2).
If Transfer Domain with op = "request" is successfully performed by the new Registrar and passes the validation steps described in section 3.4.1, the domain name goes into **pendingTransfer** (pendingTransfer/*autoRenewPeriod* if the domain name was in ok/*autoRenewPeriod* or inactive/*dnsHold*/*autoRenewPeriod* status).
The domain name remains in this status up to a maximum of 1 (one) day during which the new

Registrar can cancel the transaction by sending a Domain Transfer command with the attribute op = "cancel" (see Section 3.4.4).

The old Registrar, however, may take the following actions:

- accept the request to change the Registrar by sending Transfer Domain with the attribute op = "approve" (see Section 3.4.6);

- reject the request to change the Registrar by sending Transfer Domain with the attribute op = "reject" (see Section 3.4.8).

The commands for the deletion, approval and/or non-approval of transfer by the new and the old Registrar may be submitted without the AuthInfo for as long as the domain name is in pendingTransfer.

At the end of the pendingTransfer period, requests that have not been explicitly cancelled, rejected or approved are approved automatically by the system.

The server notifies both the old and the new Registrar of each step generated by the change of Registrar via a message in the polling queue.

Any information relating to a transfer in progress or completed may also be viewed by both the Registrars using the command Transfer Domain with the attribute op = "query". This command will be addressed in detail in Section 4.2.3.

Once the domain name is in pendingTransfer status, the change of the Registrar is charged to the new Registrar, but not immediately included in the transactions to be invoiced. The transaction will be invoiced at the end of the change of Registrar, once the transfer has been accepted either by the old Registrar or automatically by the system. In the other cases, the transaction will be returned to the new Registrar and will thus not be billed.
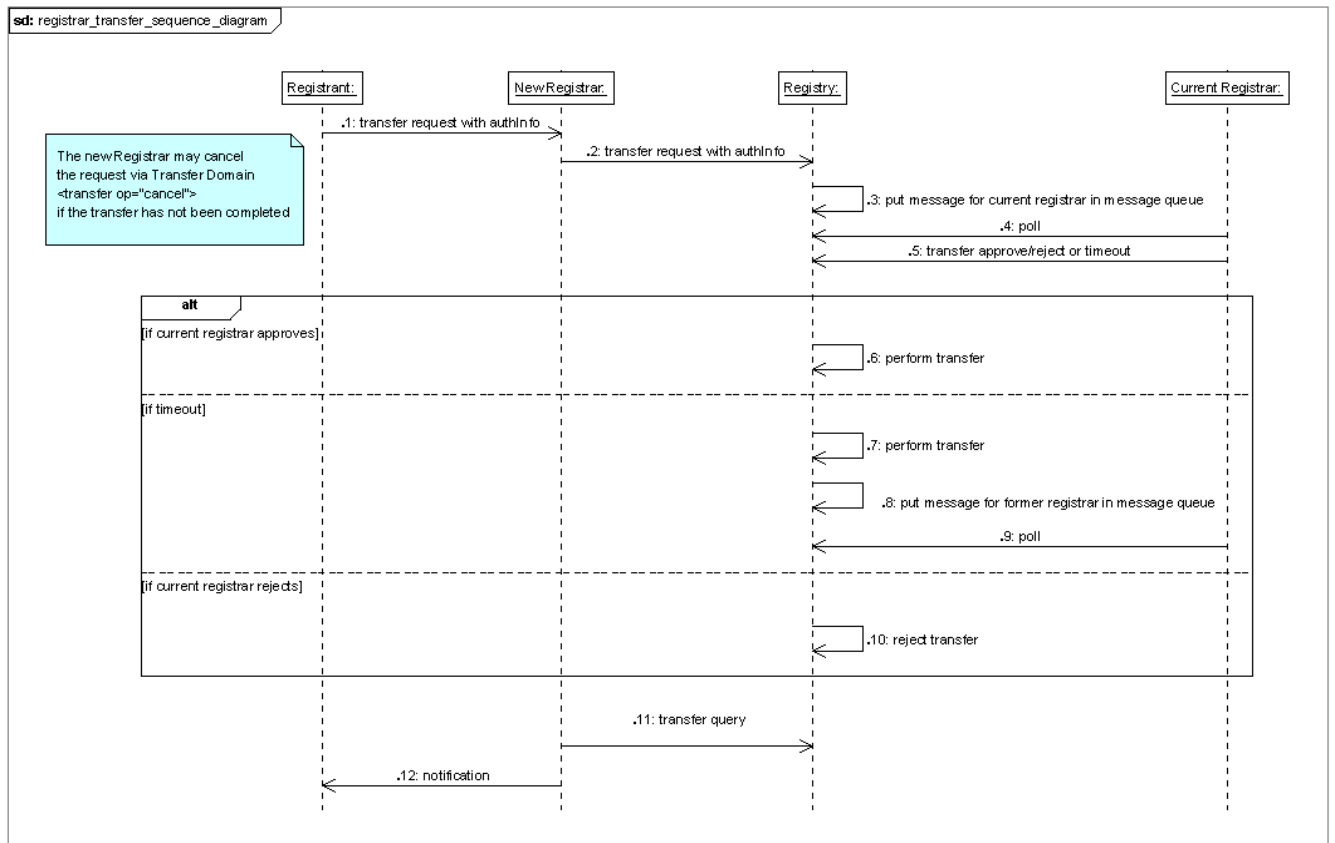
3.4.1 Validation steps for the modification of the Registrar

The system verifies that the request for Transfer Domain with op = "request" is compatible with:

- the constraints present in the XML Schema *epp-1.0.xsd*, *eppcom-1.0.xsd*, *domain-1.0.xsd*, *RGP-1.0.xsd*, *extdom-2.0.xsd* (see Appendix A - The EPP protocol);

- the following additional restrictions:
  o the Registrar that has sent the request must not be suspended;
  o the domain name for which the transaction is requested must be present in the registry Database;
  o the domain name for which the transaction is requested must not be in pendingTransfer, pendingTransfer/*bulk*, pendingUpdate, pendingDelete/*pendingDelete*, inactive/*clientHold*, inactive/*serverHold*, pendingDelete/*redemptionPeriod*, inactive/*revoked*, clientTransferProhibited, serverTransferProhibited, inactive/*toBeReassigned*;
  o the AuthInfo specified in the request must match the AuthInfo associated with the domain name in the registry Database.

3.4.2 Example of a Domain Transfer request with op = request

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <transfer op="request">
      <domain:transfer
        xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
        xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
```

```
        <domain:name>example.it</domain:name>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:transfer>
    </transfer>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

3.4.3   Example of a response to a request for Transfer Domain with op = request

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1001">
     <msg lang="en">Command completed successfully; action pending</msg>
    </result>
    <resData>
      <domain:trnData>
        <domain:name>esempio.it</domain:name>
        <domain:trStatus>pending</domain:trStatus>
        <domain:reID>NEW-REGISTRAR</domain:reID>
        <domain:reDate>2013-02-25T07:40:00+01:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2013-02-25T23:59:59+01:00</domain:acDate>
       </domain:trnData>
    </resData>
    <trID>
        <clTRID>ABC-12345</clTRID>
        <svTRID>4abdc58b-88c6-410d-9a64-c476231ccffb</svTRID>
    </trID>
  </response>
 </epp>
```

3.4.4   Example of a request for Transfer Domain with op = cancel

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <transfer op="cancel">
      <domain:transfer
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>example.it</domain:name>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:transfer>
    </transfer>
```

```
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

3.4.5 Example of a response to a request for Transfer Domain with op = cancel

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
   <response>
      <result code="1001">
         <msg lang="en">Command completed successfully</msg>
      </result>
      <resData>
       <domain:trnData>
         <domain:name>example.it</domain:name>
           <domain:trStatus>clientCancelled</domain:trStatus>
            <domain:reID>NEW-REGISTRAR</domain:reID>
            <domain:reDate>2013-02-25T07:40:00+01:00</domain:reDate>
            <domain:acID>DEMO-REGISTRAR</domain:acID>
            <domain:acDate>2013-02-25T15:00:59+01:00</domain:acDate>
        </domain:trnData>
      </resData>
      <trID>
         <clTRID>ABC-12345</clTRID>
         <svTRID>c1a27773-0527-4fc3-8f4f-00a4134d37bb</svTRID>
      </trID>
   </response>
</epp>
```

3.4.6 Example of a request for Transfer Domain with op = approve

```xml
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <transfer op="approve">
      <domain:transfer
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>example.it</domain:name>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:transfer>
    </transfer>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

3.4.7   Example of a response to a request for Transfer Domain with op = approve

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1001">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
     <domain:trnData>
       <domain:name>example.it</domain:name>
       <domain:trStatus>clientApproved</domain:trStatus>
       <domain:reID>NEW-REGISTRAR</domain:reID>
       <domain:reDate>2013-02-25T07:40:00+01:00</domain:reDate>
       <domain:acID>DEMO-REGISTRAR</domain:acID>
       <domain:acDate>2013-02-25T11:15:00+01:00</domain:acDate>
     </domain:trnData>
    </resData>
    <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>83829902-9aca-49d6-869d-b131232e80f9</svTRID>
    </trID>
  </response>
</epp>
```

3.4.8   Example of a request for Transfer Domain with op = reject

```xml
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <transfer op="reject">
      <domain:transfer
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>example.it</domain:name>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:transfer>
    </transfer>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

3.4.9   Example of a response to a request for Transfer Domain with op = reject

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
```

```
xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
xmlns="urn:ietf:params:xml:ns:epp-1.0">
<response>
  <result code="1001">
     <msg lang="en">Command completed successfully</msg>
  </result>
  <resData>
    <domain:trnData>
      <domain:name>example.it</domain:name>
      <domain:trStatus>clientRejected</domain:trStatus>
      <domain:reID>NEW-REGISTRAR</domain:reID>
      <domain:reDate>2013-02-25T07:40:00+01:00</domain:reDate>
      <domain:acID>DEMO-REGISTRAR</domain:acID>
      <domain:acDate>2013-02-25T12:25:00+01:00</domain:acDate>
    </domain:trnData>
  </resData>
  <trID>
     <clTRID>ABC-12345</clTRID>
     <svTRID>600e7e8f-8c0d-4391-b225-2cea22b525b3</svTRID>
  </trID>
</response>
</epp>
```

3.4.10 Effects of a Transfer Domain

If the change of Registrar is successful, i.e. endorsed by the old Registrar or automatically by the system:

- the "registrant" and "admin" contacts referenced in the registration of the domain name are automatically copied by the system and they are assigned a new ID in the format **DUPn** where:
  o "**DUP**" is a string of characters that is always present;
  o "**n**" is a random number (9 digits);

- the technical contact of the domain name is updated with the same contactID (in the format **DUPn**) of the Registrant referenced in the registration of the domain name;

- the expiry date of the domain name is updated;

- the domain name is put in **ok** or **inactive/*dnsHold*** status;

- the transaction is billed to the new Registrar.

The new Registrar may use the contacts with ID in the format **DUPn** or register their own contacts to be associated with the domain name (via the Create Contact + Update Domain, in Sections 3.1.1 and 3.2.2, respectively). It is recommended that they use their contact-IDs by creating new ones, if not yet registered in the Registry Database. If the new Registrar wishes to replace the **DUPn** IDs, they will have to first register their IDs (if not yet present in the Database) using Create Contact (see Section 3.1.1). Subsequently, using Update Domain, the Registrar will update the registration of the domain name in order to replace the various **DUPn** IDs with the IDs that they have just registered (see Section 3.2.2).

It is the new Registrar's responsibility to update the value of the AuthInfo and, if necessary, the hosts/*Delegation Signer* (DS) records associated with the domain name (also through an Update Domain, see Section 3.2.2).

If the new Registrar has opted for the replacement of the **DUPn** associated with the Registrant with their own ID and also wishes to change the host associated with the domain name, they must carry out two Update Domain transactions:

- the first to change the hosts associated with the domain name and, if necessary, replace the IDs of the technical and administrative contacts;

- the second to change the Registrant by replacing the **DUPn** with the new ID at the same time as the change of AuthInfo associated with the domain name.

The order in which these Update Domain requests are submitted to the server can also be inverted.

On the other hand, if the new Registrar has decided to keep the duplicate Registrant (**DUPn**), they can change the host name associated with the domain with just one Update Domain (see Section 3.2.2), replace the AuthInfo and, if necessary, the IDs of technical and administrative contacts.

Any **DUPn** duplicate contacts that are no longer referenced in any domain name in the Registry Database, may be cancelled by the Registrar using EPP Delete Contact (see Section 3.7.1).

If the change of the Registrar is not successful, i.e. is rejected by the old Registrar or cancelled by the new Registrar:

- the cost is re-debited to the new Registrar and therefore will not be invoiced;

- the domain name is placed in a status that can vary depending on whether the transaction started or not in the autoRenewPeriod and whether the old Registrar has enough credit or not, so:

  o if the transaction started in autoRenewPeriod status and the auto renew period has not yet expired, the domain name goes into one of the following statuses:
    - ok/*autoRenewPeriod* or inactive/*dnsHold*/*autoRenewPeriod* if the old Registrar has sufficient credit;
    - inactive/*notRenewed* if the old Registrar has insufficient credit;

  o if the transaction started in autoRenewPeriod status and the auto renew period has expired, the domain name goes into inactive/*noRegistrar*;

  o if the transaction did not start in autoRenewPeriod status and the auto renew period in the meanwhile has expired, the domain name goes into one of the following statuses:
    - ok/*autoRenewPeriod* or inactive/*dnsHold*/*autoRenewPeriod* if the old Registrar has sufficient credit;
    - inactive/*notRenewed* if the old Registrar has insufficient credit;

  o if the transaction did not start in *autoRenewPeriod*, and there has been no expiry, the domain name goes back to ok or inactive/*dnsHold* status.

pendingTransfer

trStatus = approved

Transfer Domain op = approve
from current Registrar

Transfer Domain op = reject
from current Registrar

trStatus = rejected

transfer started in
autoRenewPeriod?

[yes]　　[no]

[no]

trStatus = autoApproved

trStatus = pending

autoRenewPeriod

Transfer Domain op = cancel
from new Registrar

trStatus = cancelled

Expiry 1 day for
approval by Registry

Expiry of domain name

in autoRenewPeriod?　　in autoRenewPeriod?

Transfer Domain op = request da nuovo Registrar
[not (serverTransferProhibited or clientTransferProhibited)]

was in inactive/dnsHold ?

[no]　　[yes]

[no]

credit = 0 ?

[yes]

was in inactive/dnsHold ?

[yes]

[no]

[yes]

was in inactive/dnsHold ?

[yes]

[no]

inactive

ok

noRegistrar

dnsHold

autoRenewPeriod

autoRenewPeriod

Expiry of domain name

Expiry of 15 days

notRenewed

Expiry of domain name

Expiry of 15 days

3.5   Change of Registrar with the simultaneous change in the Registrant

The change of Registrar and change of Registrant of a domain name registered in the Registry Database may be performed simultaneously using EPP Transfer-Trade Domain. The command is similar to that used for the change of the Registrar (Transfer Domain with op = "request", see Section 3.4.2) with an additional extension (<extdom:trade>) that allows the new Registrar, at the request of the new Registrant, to change the Registrant and consequently the value of the AuthInfo associated with the domain name itself. To do this type of transaction, the old Registrant has to inform the new Registrant of the value of the AuthInfo currently associated with the domain name, which the new Registrar will then have to insert in the request. At the same time as the change of the Registrant with the change of the Registrar, the new Registrar must provide new AuthInfo (see Section 3.5.2) that must be notified to the new Registrant.

The new Registrar is only charged for the cost relating to the change of the Registrar.

Regarding the interaction of the new and old Registrar with the EPP server and the possibilities that the server has for notifying both the steps of the status of the transfer, what was said for the change of the Registrar is valid here too (see Section 3.4).

3.5.1   Validation steps for the change of the Registrar with a simultaneous change of the Registrant

The system verifies that the Transfer-Trade Domain request is compatible with:

- restrictions on the request for Transfer Domain with op = "request" for the change of the

Registrar (see Section 3.4.1);

● restrictions on the Domain Update request for the change of Registrant (see Section 3.3.1).

3.5.2 Example of a request for Transfer-Trade Domain

```xml
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <transfer op="request">
      <domain:transfer
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>example.it</domain:name>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:transfer>
    </transfer>
 <extension>
    <extdom:trade
      xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
       xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-2.0
extdom-2.0.xsd">
      <extdom:transferTrade>
        <extdom:newRegistrant>ml001</extdom:newRegistrant>
        <extdom:newAuthInfo>
          <extdom:pw>NEW2fooBAR</extdom:pw>
        </extdom:newAuthInfo>
      </extdom:transferTrade>
    </extdom:trade>
 </extension>
 <clTRID>ABC-12345</clTRID>
 </command>
</epp>
```

3.5.3 Examples of responses to a request for Transfer-Trade Domain

Example 1
Response to a successful Transfer-Trade Domain:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1001">
     <msg lang="en">Command completed successfully; action pending</msg>
    </result>
    <resData>
      <domain:trnData>
       <domain:name>esempio.it</domain:name>
       <domain:trStatus>pending</domain:trStatus>
```

```
      <domain:reID>NEW-REGISTRAR</domain:reID>
      <domain:reDate>2009-02-16T22:30:14+01:00</domain:reDate>
      <domain:acID>DEMO-REGISTRAR</domain:acID>
      <domain:acDate>2009-02-16T23:59:59+01:00</domain:acDate>
     </domain:trnData>
    </resData>
    <extension>
      <extdom:trade>
        <extdom:transferTrade>
          <extdom:newRegistrant>ml001</extdom:newRegistrant>
          <extdom:newAuthInfo>
            <extdom:pw>NEW2fooBAR</extdom:pw>
          </extdom:newAuthInfo>
        </extdom:transferTrade>
      </extdom:trade>
    </extension>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>f656389e-e858-4740-9480-3b8a06b20be9</svTRID>
    </trID>
  </response>
</epp>
```

Example 2
Response to a failed Transfer-Trade Domain. The error is due to wrong AuthInfo in the request:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="2202">
      <msg lang="en">Invalid authorization information</msg>
    <value>
      <extepp:wrongValue>
         <extepp:element>name</extepp:element>
         <extepp:namespace>urn:ietf:params:xml:ns:domain-
1.0</extepp:namespace>
         <extepp:value>unknown.it</extepp:value>
      </extepp:wrongValue>
    </value>
    <extValue>
      <value>
         <extepp:reasonCode>9085</extepp:reasonCode>
      </value>
      <reason lang="en">Invalid domain authorization information or
domain does not exist</reason>
    </extValue>
    </result>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>4162bf80-2de2-42bc-937a-72255b0cd83c</svTRID>
  </trID>
 </response>
</epp>
```

Example 3

Response to a failed Transfer-Trade Domain. The error is due to the fact that the domain is not in a status allowed by the transaction requested:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="2304">
        <msg lang="en">Object status prohibits operation</msg>
    <extValue>
      <value>
        <extepp:reasonCode>9022</extepp:reasonCode>
      </value>
      <reason lang="en">Domain has status
clientTransferProhibited</reason>
     </extValue>
    </result>
    <trID>
        <clTRID>ABC-12345</clTRID>
        <svTRID>feb2a1bf-7635-4c80-9f0c-8bda707e396c</svTRID>
    </trID>
   </response>
  </epp>
```

3.5.4   Effects of Trade-Domain Transfer

The impact of the Transfer-Trade is the sum of those of a Domain Transfer for the change of the Registrar (see Section 3.4.10) with those of an Update Domain for the change of the Registrant (see Section 3.3.3).

If the change of the Registrar change is successful, i.e. is approved by old Registrar or automatically by the system:

- the domain object is changed by associating with it both the new Registrant and the new AuthInfo;

- to the "admin" and "tech" contacts are assigned the same contactID of the new Registrant of the domain name indicated in the Transfer-Trade Domain command;

- the expiry date of the domain name is updated;

- the domain name goes into **ok** or **inactive/***dnsHold* status;

- the transaction is billed to the new Registrar;

- the system sends an email to both the new and the old Registrant in the format specified in Section 3.3.3.

If the change of the Registrar along with the simultaneous change of Registrant is completed successfully, the new Registrar can, if necessary, update the hosts/*Delegation Signer* (DS) records associated with the domain name and the technical and/or administrative contact with just one Domain Update transaction (see Section 3.2.2). Please note that the administrative contact can be changed only in the event the new Registrant is different from a natural person (EntityType <> 1).

If the change of Registrar is not successful, i.e. is rejected by the old Registrar or cancelled by the new Registrar:

- the change of the Registrant is not made, with the result that the Registrant and the AuthInfo currently associated with the domain name remain unchanged;

- the cost is re-credited to the new Registrar and is not invoiced;

- the status of the domain name changes according to the procedures described in Section 3.4.10.

3.6   Transfer of a large number of domain names through a *Bulk Transfer*

A *Bulk Transfer* permits, with one transaction, the transfer of a considerable number of domain names between two Registrars.

There is a fixed cost for a *Bulk Transfer* of up to 500 domain names, and an extra cost for each domain name in excess of 500 names. The costs and fees are set out in the service contract between the Registry and the Registrar.

A *Bulk Transfer* can only be requested through an online procedure available on the RAIN-NG portal (https://rain-ng.nic.it), in "Bulk Transfer" section, and by sending the Registry a written document signed by both the Registrars involved in the transaction.

If the *Bulk Transfer* is successful, there is no udpate of the expiry date of the domain names, which therefore remain unchanged.

For each *Bulk Transfer*, the Registrars involved must send a paper request to the Registry signed by their legal representatives or by persons delegated by them. The request must contain a statement that the Registrants of the domain names involved in the *Bulk Transfer* have been informed and have given their consent to the transfer.

3.6.1   Online Request Form for *Bulk Transfer*

The Registrar that wishes to perform a *Bulk Transfer* of a significant number of domain names to another Registrar, must access the RAIN-NG portal – "Bulk Transfer" section and fill in the online form described in the next paragraph.

3.6.1.1   Online request form to be filled in by the Registrar transferor

Subject: request by the Registrar transferor to change the Registrar through a *Bulk Transfer*

The undersigned (*first name, surname)*, legal representative or proxy of the legal representative (*first name, surname of legal representative)*, of the organization[2] *(name, VAT number or tax code, REG tag)* with registered office *(registered office [street/square, locality, postal code, province or foreign state])* owner of the contract for the registration of domain names in the ccTLD.it, requests that for the domain names listed below[3] there be a Bulk Transfer to the Registrar **REG tag *(give the new Registrar to which to transfer the domain names)***.

The undersigned declares that the Registrants of the domain names contained in the list have been informed and that they have accepted the *Bulk Transfer* in question[4].

The undersigned is aware that the Registry will act by civil action and, where appropriate, criminal, in the case of a false statement. The undersigned also assumes the responsibility to hold harmless and indemnify the Registry in any case where the said misrepresentation causes damage to third parties. The undersigned declares that he/she is not part of any judicial procedures relating

---

[2] The data of the organization are taken directly from the Database of the Registry. They are presented to the Registrar and cannot be modified

[3] The list is provided by uploading a text file containing one domain name per line

[4] Click to accept. If not accepted, the procedure stops

to the present *Bulk Transfer*.

"Pursuant to art. 13.1 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of individuals with regard to the processing of personal data, the personal data provided by the applicants will be collected by the Institute of Informatics and Telematics, for the purposes strictly connected to the operation of change of the Registrar of the domain name through a Bulk Transfer operation and will be processed in a database of the IIT for the execution of the operations related to the request itself as well as for the other purposes of the law, and if appropriate for the protection of rights. The Data Controller is the National Research Council, through the IIT - Registro. The data will be communicated to the other party or to the counter-parties and to third parties where required by law, by regulatory provision or by Community law, or, where appropriate, for the protection of rights. The supply of such data to the Institute of Informatics and Telematics of the CNR is mandatory for the evaluation of the request for access to personal data of the assignee of the domain name.
Pursuant to Article 15 of Reg. EU2016/679, the data subject has the right to obtain access to the personal data concerning himself or herself, to their rectification, integration or erasure, limitation or regarding opposition to their processing at any time, where there are legitimate reasons. The consent given may be revoked at any time. The data subject also has the possibility to make a complaint to the Supervisory Authority."

Date

3.6.2   Verification, Registrar transferor side, of domain names involved in *Bulk Transfer*

When the electronic form has been filled in, the request goes into "SUBMITTED". Then, an automatic procedure of the Registry checks whether the domain names listed may be subject to a "Bulk Transfer". In particular, it checks that:

- the Registrar currently associated with the domain names coincides with the Registrar who has logged on the RAIN-NG portal to make the request for transfer;

- the REG tag of the Registrar transferee inserted in the form corresponds to a REG tag registered in the Registry Database;

- the Registrar transferee has an active contract with the Registry and that transactions have not been suspended;

- the domain names in the list are in the following statuses: ok, ok/*autoRenewPeriod*, inactive/*dnsHold*, inactive/*dnsHold/autoRenewPeriod*, inactive/*notRenewed*, inactive/*dnsHold/challenged*, ok/*challenged*.

After the procedure, the system automatically generates an email to the Registrar transferor with the outcome of the procedure and a univocal identification that gives the list of domain names involved in the transaction.

If the procedure is not successful, the email contains the errors found during the verification procedure of domain names covered by the Bulk Transfer. The Bulk Transfer request goes into "REJECTED".

If successful, the Bulk Transfer request goes into "VERIFIED" and the system simultaneously sends an automatic email to the Registrar transferor. The system also generates an email to the Registrar transferee containing:

- information related to the request for transfer;

- the URL[5] to which to access the RAIN-NG portal to complete the Bulk Transfer.

---

[5] The URL allows the transferee Registrar to access the Bulk Transfer request made by the Registrar transferor that contains the list of domain names validated by the automatic procedure

The Registrar transferee has 10 (ten) working days in which to access the RAIN-NG portal and accept the request for Bulk Transfer, or reject it.

If this period terminates without the Registrar transferee having accepted or rejecting the request, the request goes into "EXPIRED".

In the case of a rejection, the system emails the Registrar transferor about this rejection and the Bulk Transfer request goes into "CANCELLED".

If accepted, the Registrar transferee must fill in the electronic form referred to in Section 3.6.2.1.

3.6.2.1 Online request form to be filled in by the Registrar transferee

Subject: request by the Registrar transferee to change the Registrar through a *Bulk Transfer*

The undersigned (*first name, surname)*, legal representative or proxy of the legal representative *(first name, surname of legal representative)*, of the organization[6] *(name, VAT number or tax code, REG tag)* with registered office *(registered office [street/square, locality, postal code, province or foreign state])* owner of the contract for the registration of domain names in the ccTLD.it, requests that for the domain names listed[7] there be a Bulk Transfer to the Registrar represented by the undersigned.

The undersigned is aware that the Registry will act by civil action and, where appropriate, criminal, in the case of a false statement. The undersigned also assumes the responsibility to hold harmless and indemnify the Registry in any case where the said misrepresentation causes damage to third parties. The undersigned declares that he/she is not part of any judicial procedures relating to the present Bulk Transfer.

"Pursuant to art. 13.1 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of individuals with regard to the processing of personal data, the personal data provided by the applicants will be collected by the Institute of Informatics and Telematics, for the purposes strictly connected to the operation of change of the Registrar of the domain name through a Bulk Transfer operation and will be processed in a database of the IIT for the execution of the operations related to the request itself as well as for the other purposes of the law, and if appropriate for the protection of rights. The Data Controller is the National Research Council, through the IIT - Registro. The data will be communicated to the other party or to the counter-parties and to third parties where required by law, by regulatory provision or by Community law, or, where appropriate, for the protection of rights. The supply of such data to the Institute of Informatics and Telematics of the CNR is mandatory for the evaluation of the request for access to personal data of the assignee of the domain name.
Pursuant to Article 15 of Reg. EU2016/679, the data subject has the right to obtain access to the personal data concerning himself or herself, to their rectification, integration or erasure, limitation or regarding opposition to their processing at any time, where there are legitimate reasons. The consent given may be revoked at any time. The data subject also has the possibility to make a complaint to the Supervisory Authority."

Date

---

[6] The data of the organization are taken directly from the Database of the Registry. They are presented to the Registrar and cannot be modified

[7] The list of domain names cannot be modified by the transferee Registrar, which can only accept or refuse the Bulk Transfer request

3.6.3 Verification and acceptance, Registrar transferee side, of the domain names involved in Bulk Transfer

Once the Bulk Transfer form has been filled in and the transaction accepted[8], the request goes into "APPROVED" and an automatic procedure verifies that the domain names on the list are in a status compatible with the Bulk Transfer. The procedure checks that the domain names are contained in the list are in one of the following statuses: ok, ok/*autoRenewPeriod*, inactive/*dnsHold*, inactive/*dnsHold/autoRenewPeriod*, inactive/*notRenewed*, inactive/*dnsHold/challenged*, ok/*challenged*.

The procedure then places the domain names into pendingTransfer/*bulk* status.

If the procedure finds that one or more domain names are in a status that is incompatible with the Bulk Transfer, it deletes them from the list of domain names and does not perform a Bulk Transfer, leaving them in the status in which they find themselves.
At the end of the Bulk Transfer, the procedure produces a PDF form containing:

- the statements of the Registrar transferor;

- the statements of the Registrar transferee;

- The URL indicating the list of domain names under Transfer Bulk.

The system then emails the Registrar transferor and the Registrar transferee with the outcome of the procedure, and the univocal identification that lists the domain names involved in the transaction. The Bulk Transfer request goes into "DOC_WAITING".
To complete the transaction, the Registrar transferee must:

- print the PDF form generated by the system and relating to the request for the Bulk Transfer, sign it himself and have it signed by the Registrar transferor;

- send it to the Registry. The document can be sent to the Registry, by either the Registrar transferor or Registrar transferee, by post, courier or fax. Requests to change the Registrar via a Bulk Transfer, sent by fax must only be sent to +39 050 570230 and must be addressed to:

  Registro .it
  Istituto di Informatica e Telematica del CNR
  Via Giuseppe Moruzzi, 1
  I-56124 Pisa (Italy)

The signed form must reach the Registry within 10 (ten) working days after the request for Bulk Transfer by the Registrar transferee and thus since the assignment of domain names in pendingTransfer/*bulk* status.

Once the correct paperwork has been received, the Registry:

- modifies the Registrar currently associated with the domain names that are in pendingTransfer/*bulk* status with the Registrar transferee;

- duplicates the "registrant" and "admin" contacts listed in the registration of the said domain names by associating them with the Registrar transferee;

- assignes the same contactID as the Registrant indicated in the domain name registration to the "tech" contact;

- restores, for the domain names in pendingTransfer/*bulk* status, the status they had before the

---

[8] Via Point and Click

Bulk Transfer transaction.

The expiry date of the said domain names is not updated.
The Bulk Transfer request goes into "COMPLETED".
However, if 10 (ten) working days pass without having received the form in question, the Registry will restore the domain names that are in pendingTransfer/*bulk* to the status before the transaction. In this case the request goes into "EXPIRED".
The following example regards the form generated automatically by the system, which one of the parties involved in the Bulk Transfer (the Registrar transferor or the Registrar transferee) must send to the Registry in order to conclude the transaction.

Example of a module automatically generated by the system to request a Bulk Transfer

<div align="right">

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

</div>

Donald Duck, the undersigned legal representative of the *Warehouse SpA* VAT number 12345678901, DONALD-REG, located in Depot 23, 57028 Suvereto, LI, holder of the contract for the registration of domain names in the ccTLD.it;

<div align="center">and</div>

Carlo Verdi, the undersigned director delegated by the legal representative *Mario Rossi* of *Colours snc*, VAT No. *21222324259, COLORS-REG*, based in *Piazza Mille Colori 1, 56100 Pisa, PI,* the contract holder for the registration of domain names in the ccTLD.it;

<div align="center">**request**</div>

the transaction of "Bulk Transfer" for the domain names in the URL https://rain.nic.it/.../ ..., from *DONALD-REG to COLOURS-REG*.

The parties, as defined above,

<div align="center">**declare that**</div>

the assignors of the domain names have been informed and have accepted the above change of Registrar.

For the protection of the contracting parties, with regard to the processing of personal data, the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of individuals with regard to the processing of personal data shall be observed.

Data are collected for the sole purpose of managing the transactions described in this document.

The undersigned are aware that the Registry will act by civil action and, where appropriate, criminal, in the case of a false statement. The undersigned also assume the responsibility to hold harmless and indemnify the Registry in any case where the said misrepresentation causes damage to third parties.

The undersigned declare that they are not a party to any legal proceedings relating to the domain names that are the subject of this Bulk Transfer.

Date,

The undersigned (Registrar transferor) *Donald Duck* _____ (Signature)	The undersigned, (Registrar transferee) *Carlo Verdi* _____ (Signature)

3.7   Procedures for deletion and recovery

Deletes are carried out using the EPP Delete command: the Registrar must submit a request to Delete Contact or Delete Domain, depending on the object to be deleted. A restore can be made following a cancellation, but only for domain objects.

3.7.1   Deletion of a registered contact

The deletion of a "registrant", "admin" or "tech" contact registered in the Registry Database is carried out by using Delete Contact.

This can only be requested by the Registrar and can be executed only if the contacts for which the cancellation request are not referenced in any domain object in the Registry Database and thus are not in ok/*linked* status.

In any case, the Registry will automatically delete all the contacts in the Database that have not been referenced in the registration of any domain name for more than 60 (sixty) days.

3.7.1.1   Delete Contact

Contacts are deleted using Delete Contact. To identify the contact on which to perform the requested transaction, the Registrar must use the ID of the contact.

3.7.1.2   Validation steps for deleting a contact

The system verifies that the request to Delete Contact is compatible with:

- the constraints present in the XML Schema *epp-1.0.xsd, eppcom-1.0.xsd, contact-1.0.xsd* (see Appendix A - The EPP protocol);

- the following additional restrictions:
    o   the contact with the specified ID must be present in the Registry Database;
    o   the contact with the specified ID must not be referenced in the registration of a domain name (i.e. the status of the contact for which the cancellation has been requested must be different from ok/*linked*);
    o   the contact with the specified ID must not be in one of the following statuses: ok/*linked*, clientDeleteProhibited, serverDeleteProhibited.

3.7.1.3   Example of request for Delete Contact

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
   <command>
     <delete>
       <contact:delete
        xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
        xsi:schemaLocation="urn:ietf:params:xml:ns:contact-1.0 contact-
1.0.xsd">
        <contact:id>cl001</contact:id>
       </contact:delete>
     </delete>
     <clTRID>ABC-12345</clTRID>
   </command>
 </epp>
```

3.7.1.4   Examples of responses to a request for Delete Contact

Example 1

Response to a successful request for Delete Contact:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
       <msg lang="en">Command completed successfully</msg>
    </result>
    <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>96e857f8-449d-41c4-9591-999d1ee5510e</svTRID>
    </trID>
  </response>
</epp>
```

Example 2

Response to unsuccessful Delete Contact. The error is due to the fact that the contact is referenced
in the registration of at least one domain name.

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="2305">
       <msg lang="en">Object association prohibits operation</msg>
       <value>
        <extepp:wrongValue>
          <extepp:element>id</extepp:element>
          <extepp:namespace>urn:ietf:params:xml:ns:contact-
1.0</extepp:namespace>
          <extepp:value>MB8015</extepp:value>
        </extepp:wrongValue>
       </value>
       <extValue>
         <value>
             <extepp:reasonCode>8005</extepp:reasonCode>
         </value>
         <reason lang="en">Contact is associated with domains</reason>
       </extValue>
    </result>
    <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>a84849d3-ac01-4e4b-b9cd-36948dda02bd</svTRID>
```

```
      </trID>
    </response>
</epp>
```

3.7.1.5 Effects of Delete Contact

If the Delete Contact requested by the Registrar is executed successfully and passes the validation steps described in Section 3.7.1.2, the object contact is immediately removed from the list of active contacts and, therefore, cannot be subject to any transaction.

3.7.2 The Drop Time

The Drop Time process enables the cancellation of domain names at scheduled times.

3.7.2.1 The Drop Time in the ccTLD .it

The .it domain names that are in pendingDelete/*pendingDelete* status, are definitively cancelled from the Database of the Registry according to the Drop Time process.

At 01:00:00 of each day the Registry automatically creates the lists containing the domain names that in the previous day were in pendingDelete/*pendingDelete* status. These lists, as soon as they are created, are published in the dedicated section of the website of the Registry (http://www.nic.it/droptime). The above mentioned lists, in addition to the list of domain names, contain the date and exact time in which the domain names will be cancelled.

Once cancelled, the domain names are immediately available online for free allocation.

Please note that, in order to register a domain name that has been subject to a cancellation in the previous 7 (seven) days, the Registrar will have to submit the Create Domain request to the server "epp-deleted.nic.it" (see Section 3.1.3).

3.7.2.2 Example of cancellation according to Drop Time process

Suppose to have 100 domain names that **today** have been put in pendingDelete/*pendingDelete* status:

- these domain names, at 01:00:00 of **tomorrow,** will compose, for example, two lists of domain names in cancellation (*list A* and *list B*);

- the two lists are published on the Website of the Registry immediately after their creation;

- the domain names indicated in the first list (*list A*) are cancelled at **09:00** of **the day after tomorrow**;

- the domain names indicated in the second list (*list B*) are cancelled at **16:00** of **the day after tomorrow**.

3.7.3 Deleting a registered domain name

A domain name registered in the Registry Database is deleted using Delete Domain.

The transaction allows the Registrar to cancel a domain name at the request of the Registrant or a competent Authority, that is, the maintenance period having expired, when the juridical obligation on the basis of which the Registrar was obliged to maintain the domain name is terminated, in fact or in law.

3.7.3.1 Validation steps for the deletion of a domain name

The system verifies that the Delete Domain request is compatible with:

- the constraints present in the XML Schema epp-1.0.xsd, eppcom-1.0.xsd, domain-1.0.xsd (see Appendix A - The EPP protocol);

- the following additional restrictions:
  - o the domain name for which the transaction is requested must be present in the Registry

Database;
- o the domain name for which the transaction is requested must not be in pendingDelete/*pendingDelete*, pendingDelete/*redemptionPeriod*, pendingUpdate, pendingTransfer, pendingTransfer/bulk, ok/*noRegistrar*, inactive/*dnsHold*/*noRegistrar*, inactive/*noRegistrar*, inactive/*serverHold*, inactive/*clientHold*, clientDeleteProhibited, serverDeleteProhibited, inactive/*revoked*, inactive/*toBeReassigned.*

3.7.3.2   Example of a request for Delete Domain

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <delete>
      <domain:delete
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>example.it</domain:name>
      </domain:delete>
    </delete>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

3.7.3.3   Examples of responses to a request for Delete Domain

Example 1
Response to a successful Delete Domain:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
 <response>
   <result code="1000">
       <msg lang="en">Command completed successfully</msg>
    </result>
    <extension>
      <extdom:chgStatusMsgData>
        <extdom:name>esempio.it</extdom:name>
         <extdom:targetStatus>
           <domain:status lang="en" s="pendingDelete"/>
           <rgp:rgpStatus lang="en" s="redemptionPeriod"/>
         </extdom:targetStatus>
      </extdom:chgStatusMsgData>
    </extension>
    <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>841a4cc0-de99-4215-9d4f14c0089dbddd</svTRID>
    </trID>
  </response>
</epp>
```

Example 2

Response to a failed Delete Domain. The error is due to the fact that the domain name is in a status that prohibits a delete.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="2304">
      <msg lang="en">Object status prohibits operation</msg>
      <extValue>
       <value>
          <extepp:reasonCode>9024</extepp:reasonCode>
       </value>
     <reason lang="en">Domain has status clientDeleteProhibited</reason>
      </extValue>
    </result>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>0d495519-4bb0-4e6a-810e-858cee002b71</svTRID>
    </trID>
  </response>
</epp>
```

3.7.3.4   Effects of Delete Domain

If the Delete Domain command requested by the Registrar is executed successfully and passes the validation steps described in section 3.7.3.1, the domain name is not immediately removed from the Database of the Registry.

The domain name goes into pendingDelete/*redemptionPeriod* for a maximum of 30 (thirty) days.

The domain names that are in pendingDelete*/redemptionPeriod* status are not delegates in the ccTLD .it zone and can be recovered through the EPP Update Domain command with ext = restore (see Section 3.7.4).

On the expiry of the pendingDelete/*redemptionPeriod*, the domain name goes into pendingDelete/*pendingDelete* status to be finally cancelled according to the Drop Time process described in Section 3.7.2.

Once deleted, the domain name is removed from the Database of the Registry and is immediately available online for a new registration.

The domain names that are in pendingDelete/*pendingDelete* status cannot be subjected to any transaction.

3.7.4   Restoring a deleted domain name

A domain name that has been deleted from the Registry Database after a successful delete can be restored through the EPP Update Domain command with ext=restore.

The transaction allows the Registrar to restore a domain name in pendingDelete/*redemptionPeriod* or pendingDelete/clientTransferProhibited/*redemptionPeriod*, at the request of the Registrant or a competent Authority. The domain names which are in ok/*noRegistrar*, inactive/*dnsHold*/*noRegistrar* or inactive/*noRegistrar* status can be restored through the EPP Update Domain command with ext=restore as well.

A domain name that has been deleted from the Registry Database after a successful delete can be

restored also by a suspended Registrar.

3.7.4.1 Validation steps for the restoration of a domain name

The system verifies that the request for restoration of a domain name is compatible with:

- the constraints present in the XML Schema *epp-1.0.xsd, eppcom-1.0.xsd, domain-1.0.xsd, RGP-1.0.xsd* (see Appendix A - The EPP protocol);

- the following additional restrictions:
  - o the domain name for which the transaction is requested must be present in the Registry Database;
  - o the domain name for which the transaction is requested must be in one of the following statuses: pendingDelete/*redemptionPeriod,* pendingDelete/clientTransferProhibited/*redemptionPeriod*, ok/*noRegistrar*, inactive/*dnsHold*/*noRegistrar* or inactive/*noRegistrar*.

3.7.4.2 Example of Update Domain request with ext = restore

The process of restoring a domain name is implemented as an extension of a normal request for Update Domain, using Tgp-1.0.xsd and the interaction modes between client and server as described in the RFC "Domain Registry Grace Period Mapping for the Extensible Provisioning Protocol (EPP)". The EPP server of the Registry implements the following grace periods:

- auto renew period: this is the grace period following the automatic renewal of a domain name on the expiry of its validity;

- redemption period: this is the grace period following the receipt of a client request for a Delete Domain. When the name is in this status it can be restored. The effect of the restore is to immediately recover the domain name that is reported in the status prior to receipt of the request for Delete Domain. Unlike what is specified in the RFC mentioned above, the EPP server of the Registry does not need a report from the client to justify the request to restore a domain name previously subject to a Delete Domain command.

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <update>
      <domain:update
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>example.it</domain:name>
        <domain:chg/>
      </domain:update>
    </update>
    <extension>
      <rgp:update xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:rgp-1.0 rgp-1.0.xsd">
        <rgp:restore op="request"/>
      </rgp:update>
    </extension>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

3.7.4.3 Examples of responses to a request for Update Domain with ext=restore

Example 1

Response to successful Update Domain with ext=restore:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
 <response>
   <result code="1000">
      <msg lang="en">Command completed successfully</msg>
   </result>
   <extension>
    <extdom:chgStatusMsgData>
      <extdom:name>esempio.it</extdom:name>
       <extdom:targetStatus>
         <domain:status lang="en" s="ok"/>
      </extdom:targetStatus>
    </extdom:chgStatusMsgData>
   </extension>
   <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>08ef9111-a1ee-45ea-ac3d-2459f6cd6fec</svTRID>
   </trID>
  </response>
 </epp>
```

Example 2

Response to failed Update Domain con ext=restore. The error is due to the fact that the domain name is an a status that prohibits a restore.

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="2304">
      <msg lang="en">Object status prohibits operation</msg>
      <extValue>
        <value>
           <expepp:reasonCode>9055</extepp:reasonCode>
        </value>
        <reason lang="en">Domain has status ok</reason>
      </extValue>
    </result>
    <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>0abb9699-a408-45ba-9241-fb8cbbb8f6e0</svTRID>
```

```
        </trID>
      </response>
</epp>
```

3.7.4.4 Effects of Update Domain with ext = restore

If the command Update Domain with ext = restore requested by the Registrar is successful and passes the validation steps described in Section 3.7.4.1, the domain name is immediately restored. The process of restoring a domain name is charged to the Registrar and is immediately available for invoicing except for the domain names restoration from ok/*noRegistrar*, inactive/*dnsHold*/*noRegistrar* or inactive/*noRegistrar* status.

Following the receipt of Update Domain with ext = restore, the domain name is listed in the status preceding the request for cancellation.

The following diagram shows the various steps in the deletion and possible restoration of a domain name:
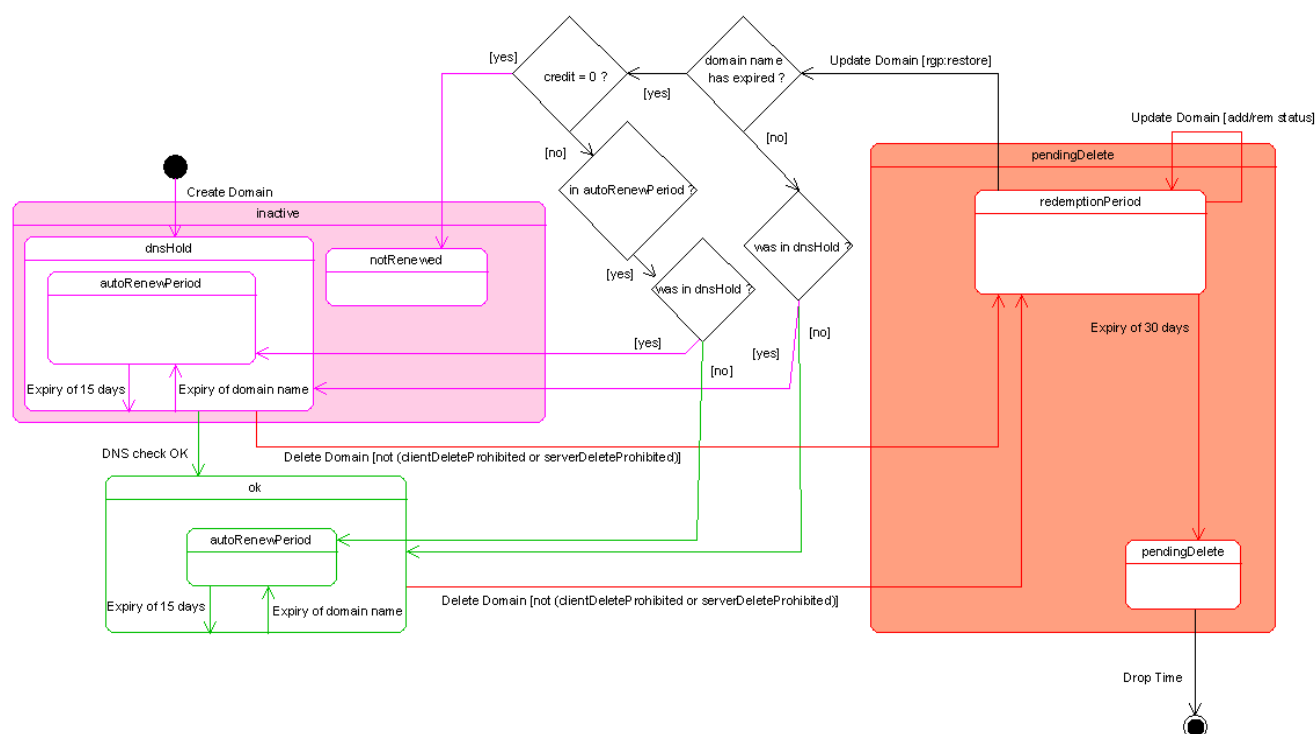
3.8   Verification of domain names

The Registry can check through documented evidence what the Registrant has declared to the Registrar during the registration of the domain name. These checks are divided into:

- verification of the written document of registration;
- verification of subjective requirements.

3.8.1   Verification of the written document of registration

The Registry may verify the written documentation form as described below:

- random. The Registry periodically makes checks on domain names that have been registered and managed synchronously by extracting them at random from the Database. A domain name that has been subject to such a verification will not be re-extracted from the Database in future random checks, unless the domain name in question, has a change in Registrant, in which case it may be re-extracted;

- at any time the Registry deems it necessary or urgent, and in all cases provided for by the Regulation.

When one of the above mentioned verifications is activated, the Registry prohibits any operation on the domain name by putting it in the status of "serverDeleteProhibited/serverUpdateProhibited/serverTransferProhibited".

The Registry initiates the verification procedures, interacting via email with the Registrar that manages the domain name subject to verification. On this occasion, the Registry asks the Registrar to transmit the documents referred to in Section 3.8.1.1, relating to the registration of the domain name. The Registrar must send the above documentation within 10 (ten) working days from receipt of the request.

The documentation can be sent in advance to the Registry as follows:

- via email as a pdf, to the address written-doc@nic.it;
- via fax, to the number +39 050 570230

It must in any case be sent to the Registry by PEC ("certified e-mail") or registered letter or courier to the address:

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

Once the documentation has been received, within 5 (five) working days, the Registry checks that it corresponds to the form contained in Section 3.8.1.1 and that the data correspond to those in the Database.

If the check finds no discrepancies, the domain name is restored to the previous status.

If the check finds discrepancies, i.e. there is no correspondence between the data provided by the Registrant at the moment of registration and declared by the Registrar in the written document of registration and the data in the Database; or the Registrar fails to send the written document of registration or it is incomplete or incorrect, the Registry will act accordingly to the "Registry/Registrar Service Contract".

The domain name will remain in the status of "serverDeleteProhibited/serverUpdateProhibited/serverTransferProhibited" until the investigation concerning the Registrar is concluded.

3.8.1.1   Documentation to send to the Registry

If written documentation is required for random checks or at any time the Registry deems it

necessary or urgent, and in all cases provided for by the Regulations, the Registrar must send to the Registry the information contained in the form indicated in the following Section (3.8.1.1.1). The Registrar shall also enclose relevant declaration proving that the registration procedure was made in accordance with the provisions of the Registry/Registrar Contract and the Regulations and that the contents and information provided are all those in its possession and did not undergo any alteration.

If requested, the Registrar must send to the Registry:

I. the written document of registration referred to in the following Section (3.8.1.1.1) with the "time stamp" indicating the date, with accuracy to the second, of the completed operation;

II. the confirmation e-mail informing the Registrant of domain name registration (copy of the electronic communication to the address of the Registrant), in accordance with Decree 206/2005, Consumer Code or 2000/31/EC Directive (Directive regarding Electronic Commerce);

III. the declaration, in accordance with the Presidential Decree (DPR) 445/2000 according to what indicated in paragraph 3.8.1.1.1, section "Declaration to send to the Registry along with the written document", and accompanied by a copy of the identity document, stating that:
   - what is sent is a certified copy of the information on its servers;
   - the servers at the time of the transaction were synchronized with the Italian official time signal or of the country in which the Registrar is established.

For Italy the supplier of the official time signal is the National Institute of Metrological Research (INRIM).

This documentation must be sent to the Registry in written form or equivalent in accordance with the Digital Administrative Code (DAC).

The DPR 445/2000 mentioned above only applies to:

- Italian citizens and European Union citizens;

- juridical persons, partnerships, public administrations and bodies, associations and committees which have their registered office in Italy or in one of the countries of the European Union;

- citizens of countries outside the European Union legally residing in Italy, only for the states, personal qualities and facts certifiable or ascertainable by Italian public entities.

The Registrars that do not fall within one of these categories must submit an Affidavit of identical content, or, in States where there is no such declaration, a declaration made by the person concerned before a competent judicial or administrative authority, a notary or a professional body qualified to receive it in the country of establishment. The document, unless different international conventions require, must be provided with an apostille or legalization, depending on the adherence or not adherence of the State in which it is produced to the Hague Convention on the Abolition of legalisation.

3.8.1.1.1 Written document of registration form

<div align="right">

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

</div>

Sect. 1 - Registrant Data

ORG: e.g. XY Ltd
Address: e.g. Via Caspio, 9 00100 Roma - RM)
Country: e.g. IT

Phone: e.g. +39.06776511
Fax: e.g. +39.06776512
RegCode: e.g. 09558132581
Email: e.g. xyzo@pippo.it
Requestor: Company name, legally represented by e.g. Joe Bloggs

Sect. 2 - Registration form for the domain name *pippo*.it

XY (*company name*)/The applicant (*if a natural person*), Registrant of the domain name pippo.it, hereinafter Registrant, with registered office in Via Caspio, 9 00100 Roma (RM) - IT/natural person (*street/square, town, post code, province, VAT, if applicable*) fax number (*give fax number*), e-mail xyzo@pippo.it (*give Registrant e-mail*), legally represented by (*Joe Bloggs, tax payer code of the legal representative, only for organizations*) requests the registration of the domain name pippo.it - through the Registrar (*XY-Registrar*) and takes all responsibilities arising from the use and management of the domain name, and undertakes to inform the Registrar or, in subordinate to the Registry, of any changes of in his/her/their data as outlined in the Rules for assignment of the ccTLD .it and in the Guidelines (http://www.nic.it).

Sect. 3 - Declarations and assumptions of responsibility

The Registrant of the domain name in question, declares under their own responsibility that they are:

a)   *in possession of the citizenship or resident in a country of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation (in the case of registration for natural persons);*

b)   *established in a country of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation (in the case of registration for other organizations);*

c)   *aware and accept that the registration and management of a domain name is subject to the "Rules of assignment and management of domain names in ccTLD. it" and "Regulations for the resolution of disputes in the ccTLD.it" and their subsequent amendments;*

d)   *entitled to the use and/or legal availability of the domain name applied for, and that they do not prejudice, with the request for registration, the rights of others;*

e)   *aware that for the inclusion of personal data in the Database of assigned domain names, and their possible dissemination and accessibility via the Internet, consent must be given explicitly by checking the appropriate boxes in the disclosure below. See "The policy of the .it Registry in the Whois Database" on the website of the Registry (http://www.nic.it);*

f)   *aware and agree that in the case of erroneous or false declarations in this request, the Registry shall immediately revoke the domain name, or proceed with other legal actions. In such case the revocation shall not in any way give rise to claims against the Registry;*

g)   *release the Registry from any responsibility resulting from the assignment and use of the domain name by the natural person that has made the request;*

h)   *accept Italian jurisdiction and laws of the Italian State.*

☐   YES accept   ☐   NO do not accept

Sect. 4 - Terms and conditions, and acquisition of consent for the processing of data for the registration of the domain name and for visibility on the Internet

Information pursuant to arts. 13 and 14 of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data

To carry out activities to which the present disclosure relates:

a) *the holder of the treatment of data is the Italian National Research Council, through the Institute of Informatics and Telematics of the CNR,.it Registry (http://www.nic.it);*

b) *the Registrar is responsible for processing the data and manages contractual relations with the Registrant, the identification data are contained in the contract between the said Registrar and the Registrant, and therefore known by the party concerned. A list of those responsible for processing data is available on the website of the Registry (http://www.nic.it). The Registrar is the holder of the treatment of data with regard to contractual relations directly with the Registrant, not included in this disclosure;*

c) *the Data Protection Officer - DPO - for the Registro.it – IIT-CNR, is Mr. Giuliano Salberini (rdp@cnr.it);*

d) *the Data Protection Officer - DPO - for the Registrar is: <indicate identity and contact>, where it exists, or a contact person indicated by the Registrar;*

e) *the mandatory information is that information that is essential in order for the service requested to be provided.*

The Registrant's personal data are collected by the Registrar who manages contractual relations with the Registrant using this form, in order to register and manage the domain name in the Data Base of Assigned Names at the Institute of Information and Telematics of the CNR, .it Registry.

Additional requirements of information about use of personal data:

a) *Purpose of data collection. The Registrant's personal data are collected by the Registrar for registering and managing the domain name in the database of domain names assigned to the Institute of Informatics and Telematics IIT-Registro.*

b) *Methods of data collection and processing. The data treatment is carried out by our authorized personnel, using automated tools in compliance with current legislation and in accordance with the principles of correctness, lawfulness, transparency, and for the protection of your privacy and your rights, for the time strictly necessary for use of the service. Our information system is structured in such a way as to prevent data loss, illicit or incorrect use and unauthorized access.*

c) *Consequences in case of refusal. The information collected will be processed for the purposes of administrative and accounting management, protection of rights, and other purposes related to the registration, management, contestation, transfer and cancellation of the domain name, as well as to comply with legal obligations, regulations or EU legislation. It is communicated to third parties for ancillary or necessary activities related to the aforementioned purposes. The collection of personal data supplied by you is necessary for the implementation of the service offered. Failure or partial provision of the requested personal data makes the service not deliverable. The Whois service does not allow the display of any data relating to the contacts of a domain name (registrant, admin and tech) if the domain name itself has been registered by an individual and consent to data publication has not been given (consentForPublishing field set to "false"). The consent to the diffusion and accessibility of personal data is not provided in those cases where data must be disclosed in order to comply with legal obligations. In Accordance with Art. 40, paragraph 2, letter b) of Decree-Law 6 December 2011, no. 201, converted, with amendments, by Law*

of 22 December 2011, no. 214, legal persons, entities or associations are no longer eligible to receive data handling information or any request for consent previously required under Regulation (EU) 2016/679. Natural persons whose data is processed in connection with the activities related to this contract continue to have the right, even if provided for such purposes by people who are no longer eligible, under the terms of the duties of the aforesaid persons of informing and obtaining consent to this data processing policy.

d)   *Subjects to whom data can be communicated. Your data will be communicated to the IIT-Registro in order to carry out the contract and the related administrative and accounting activities. The data communicated will be only those strictly necessary for the purpose of the requested service. The data will not be used and communicated to third parties for marketing or direct marketing. Your data will not be disclosed to third parties in any way whatsoever without your prior and specific consent, but may be made available to the Judicial Authorities, if requested.*

e)   *Transfer of personal data to third party countries or international organizations. Your data may be transferred to third party countries outside the EU, in compliance with current legislation.*

f)   *Personal data retention period. Your personal data will be kept for the time considered useful for the carrying out of the requested service or for the management of subsequent administrative and accounting activities.*

g)   *Registrant rights and revocation of consent given:*

- *Right of access (Article 15 - EU Reg. 2016/679): the right of access gives the right to receive a copy of the personal data being processed. This includes the expected retention period or, if this is not possible, the criteria used to define this period, as well as the guarantees applied in case of transfer of data to third party countries.*

- *Right to data portability (art. 20 - Reg. UE 2016/679): The Registrant has the right to request at any time that their data be transferred from one Registrar to another through automated procedures.*

- *If you believe that your data have been processed illegitimately, you have the right to contact the Supervisory Authority to register a complaint.*

- At any time the Registrant may also revoke the consent given as specified in this circular. In these cases, the service offered will no longer be available.

These rights may be exercised by request to the Registrar who manages the contractual relationship with the Registrant and subordinate to the Institute of Informatics and Telematics of CNR, Via Giuseppe Moruzzi, 1, I-56124 Pisa, Italy.

Sect. 5 - Consent to the processing of personal data for registration

The interested party, after reading the above disclosure, gives consent to the processing of information required for registration, as defined in the above disclosure.

Giving consent is optional, but if no consent is given, it will not be possible to finalize the registration, assignment and management of the domain name.

☐   YES accept   ☐   NO do not accept

Sect. 6 - Consent to the processing of personal data for diffusion and accessibility via the Internet

The interested party, after reading the above disclosure, gives consent to the dissemination and accessibility via the Internet, as defined in the disclosure above.

Giving consent is optional, but absence of consent does not allow the dissemination and accessibility of Internet data.

☐   YES accept   ☐   NO do not accept

Sec. 7 - Consent to the transfer of personal data to third party countries

The interested party, after reading the above information, gives consent to personal data transfers to a third party country outside the EU, in compliance with current legislation.

The provision of data is optional, but if no consent is given, it will not be possible to complete the registration, assignment and management of the domain name.

☐   YES accept   ☐   NO do not accept

Sect. 8 - Explicit Acceptance of the following points

For explicit acceptance, the interested party declares that they:

a) *are aware and agree that the registration and management of a domain name is subject to the "Rules of assignment and management of domain names in ccTLD.it" and "Regulations for the resolution of disputes in the ccTLD.it" and their subsequent amendments;*

b) *are aware and agree that in the case of erroneous or false declarations in this request, the Registry shall immediately revoke the domain name, or proceed with other legal actions. In such case the revocation shall not in any way give rise to claims against the Registry;*

c) *release the Registry from any responsibility resulting from the assignment and use of the domain name by the natural person that has made the request;*

d) *accept the Italian jurisdiction and laws of the Italian State.*

☐   YES accept   ☐   NO do not accept

Sect. 9 - Summary data of the Registrant

Acceptance Clauses and Assumption of Responsibility: YES
Terms and Conditions and Data Processing: YES
Terms and Conditions and Data diffusion via the Internet: NO
Acceptance of Restrictive Clauses: YES
Registrant email: xyzo@pippo.it

Declaration to send to the Registry along with the written document

(*to be sent on unstamped paper*)

DECLARATION IN LIEU OF AFFIDAVIT
(art. 19, 38 and 47 of the Presidential Decree DPR n.445 of December 28 2000)

The undersigned

Surname:_____

(indicate maiden name for women)

Name:_____

Tax Code:_____

Born in_____ Province (or foreign state) _____

on _____

Current abode in _____

Province (or foreign state) _____

Address_____ Post Code _____

As owner/legal representative/delegated by

Name_____

Address_____

Tax Code_____

VAT Number _____

REG Tag _____

Aware that false declarations are punished according to the Criminal Code and specific laws

DECLARES

- that the registration procedure was carried out in accordance with the Contract and Regulations and precisely by means of issue of the data and assumption by the Registrant of the obligations contained in the registration forms;

- that the copy of the registration form, including the time stamp and the copy of registration confirmation e-mail, attached to this declaration, conforms to the originals and has not been altered in any way whatsoever.

Place and date_____

Signature_____

The declarations in lieu of affidavit must be accompanied by non-authenticated photocopy of an identity document of the subscriber.

3.8.2   Verification of subjective requirements

The verification of subjective requirements can be activated by the Registry whenever deemed necessary or urgent, or at the request of a third party to protect their rights. In both cases the Registry shall be able to check that the Registrant of a domain name truly satisfies the subjective requirements that led to a domain name being assigned.

3.8.2.1   Verification of subjective requirements upon request of a third party

In the event that a third party wishes to initiate a verification of subjective requirements, the

interested subject must send to the Registry a paper request formatted according to the forms available on the Web site of the Registry, as specified in Sections 3.8.2.1.1 and 3.8.2.1.2 of this document.

The form is divided into four parts:

- the first part contains the following information:
  - the domain name object of the request for verification of subjective requirements;
  - if the applicant requesting the verification is a natural person it contains:
    - their personal and fiscal details;
  - if the applicant requesting the verification is a subject other than a natural person it contains:
    - the personal and fiscal details of the person who, as a representative of the Registrant undersigns the request, and also the registered office and fiscal details of the requesting organization;
  - the reasons for the request for verification;
- the second part relates to the indemnity in case of a false declaration;
- the third part contains:
  - the place and date in which the document of the request for verification of subjective requirements is produced;
  - the signature of the applicant;
- the fourth part is relative to the information regarding personal data protection and treatment.

No variations may be made to the forms indicated above. The applicant of the verification of subjective requirements must compile all mandatory fields for their "category" of reference, as summarized in the following table.

Compilation of the request for verification of subjective requirements

Data required	Request for verification of subjective requirements by natural person (without VAT number)	Request for verification of subjective requirements by subjects other than natural persons	Notes
Name and surname of the applicant and signatory of request for verification	*Mandatory*	*Mandatory*	(1)
Place of birth	*Mandatory*	*Mandatory*	(2)
Date of birth	*Mandatory*	*Mandatory*	(3)
Residence	*Mandatory*	*"not applicable"*	(4)
Tax code/Identity document	*Mandatory*	*Mandatory*	(5)
Company name	*"not applicable"*	*Mandatory*	(6)
Name and surname of the legal representative	*"not applicable"*	*Mandatory*	
Registered office	*"not applicable"*	*Mandatory*	(7)
VAT number	*"not applicable"*	*Mandatory*	(8)
E-mail address	*Mandatory*	*Mandatory*	(9)
Signature of applicant	*Mandatory*	*Mandatory*	(10)

	Notes
(1)	Natural persons who have more than one name and surname must specify them in their full form. Abbreviated names or names including full stops are not permitted.
(2)	The place of birth must be specified in its complete form, including province and/or foreign state of birth.
(3)	The date of birth of the person indicated in (1) must be written in the format "dd-mm-yyyy".
(4)	There must be the complete postal address of the person in (1). For natural persons resident out of Italy, it is also necessary to specify the foreign state of residence.
(5)	For Italian citizens the tax code must be specified; for citizens resident in other member states of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation, where there is not a given equivalent of the tax code, the number of an identity document must be specified.
(6)	The exact and full name of the requesting company must be indicated (e.g: Pippo di Mario Rossi, Pippo sas di Mario Bianchi & c, etc.).
(7)	The registered office of the organization in (6) requesting the domain name (complete postal address, including: street, town, province, post code, foreign state if relevant).
(8)	The VAT number or numerical tax code of the requesting organization. For de facto associations without numerical tax code, the date of constitution must be indicated. For the organizations located in a member state of the European Economic Area (EEA) different from Italy, the Vatican City State, the Republic of San Marino or the Swiss Confederation, an equivalent data item must be indicated (e.g.: tax code).
(9)	An e-mail address, valid according to the RFC 2822 standard and subsequent modifications, to which the Registry sends all the notifications regarding the request for verification of subjective requirements.
(10)	The request for verification of subjective requirements must be signed by the person indicated in (1).

For applicants (natural and/or juridical persons) belonging to a member state of the European Economic Area (EEA) different from Italy, the Vatican City State, the Republic of San Marino or the Swiss Confederation the same principles are applied, except as foreseen by current legislation in the single member states.

3.8.2.1.1 Request form for verification of subjective requirements by a natural person

<div align="right">
Al Registro .it
c/o Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)
</div>

Subject: request for verification of subjective requirements for the domain name _____*.IT*

The undersigned *(name and surname)* born in *(place of birth and [province or foreign state])* on *(date of birth)* resident in *(postal address [street/square, locality, post code, province or foreign state])* tax code or number of identity document *(tax code or number of identity document for foreign citizen not residing in Italy)* email address *(user@dominio)*, requests the verification of subjective requirements of the Registrant of the domain name in hand for the following reason *(motivating description)*.

The undersigned is aware that the Registry may act towards them with civil action and, if it is the case, penally, in the hypothesis of false declaration, and they also assure that the Registry is fully free of responsibility where there may be damages caused to third parties by the aforementioned false declaration.

Place, date

Request for verification of subjective requirements by a natural person – Version 2018-01

The undersigned
Name and Surname

_____

(Signature)

"Pursuant to art. 13.1 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of individuals with regard to the processing of personal data, the personal data provided by the applicants will be collected by the Institute of Informatics and Telematics, for the purposes strictly connected to the operation of verification of subjective requirements of the domain name and will be processed in a database of the IIT for the execution of the operations related to the request itself as well as for the other purposes of the law, and if appropriate for the protection of rights. The Data Controller is the National Research Council, through the IIT - Registro. The data will be communicated to the other party or to the counter-parties and to third parties where required by law, by regulatory provision or by Community law, or, where appropriate, for the protection of rights. The supply of such data to the Institute of Informatics and Telematics of the CNR is mandatory for the evaluation of the request for access to personal data of the assignee of the domain name.
Pursuant to Article 15 of Reg. EU2016/679, the data subject has the right to obtain access to the personal data concerning himself or herself, to their rectification, integration or erasure, limitation or regarding opposition to their processing at any time, where there are legitimate reasons. The consent given may be revoked at any time. The data subject also has the possibility to make a complaint to the Supervisory Authority."

3.8.2.1.2 Request form for verification of subjective requirements by a subject other than a
        natural person

Al Registro .it
c/o Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

Subject: request for verification of subjective requirements requirements for the domain name
_____*.IT*

The undersigned *(first name and surname)* born in *(place of birth and [province or foreign state* on *(date of birth)* tax code or number of identity document *(tax code or number of identity document for foreign citizens not residing in Italy)*, delegated to represent for the present agreement the organization named *(company name)* with legal representative *(first name and surname)* VAT number *(VAT number or numerical tax code)* with registered office in *(registered office [street/square, locality, post code, province or foreign state])* e-mail address *(user@dominio),* requests the verification of the subjective requirements of the Registrant of the domain name in hand for the following reason *(motivating description)*.
The undersigned is aware that the Registry may act towards them with civil action and, if it is the case, penally, in the hypothesis of false declaration, and they also assure that the Registry is fully free of responsibility where there may be damages caused to third parties by the aforementioned false declaration.
Place, date

Request for verification of subjective requirements by a subject other than a natural person - Version 2018-01

The undersigned
Name and Surname

_____

(Signature)

"Pursuant to art. 13.1 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of individuals with regard to the processing of personal data, the personal data provided by the applicants will be collected by the Institute of Informatics and Telematics, for the purposes strictly connected to the operation of verification of subjective requirements of the domain name and will be processed in a database of the IIT for the execution of the operations related to the request itself as well as for the other purposes of the law, and if appropriate for the protection of rights. The Data Controller is the National Research Council, through the IIT - Registro. The data will be communicated to the other party or to the counter-parties and to third parties where required by law, by regulatory provision or by Community law, or, where appropriate, for the protection of rights. The supply of such data to the Institute of Informatics and Telematics of the CNR is mandatory for the evaluation of the request for access to personal data of the assignee of the domain name.
Pursuant to Article 15 of Reg. EU2016/679, the data subject has the right to obtain access to the personal data concerning himself or herself, to their rectification, integration or erasure, limitation or regarding opposition to their processing at any time, where there are legitimate reasons. The consent given may be revoked at any time. The data subject also has the possibility to make a complaint to the Supervisory Authority."

3.8.2.1.3 Sending the request for verification of subjective requirements to the Registry

The request for verification of subjective requirements must be sent to the Registry by PEC ("certified e-mail") or registered letter or courier or fax to the address:

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

Requests sent via fax must be sent to the number +39 050 570230.
The compilation of the requests can be made on multiple pages (A4) and with size and character font different from that indicated in the forms on the web site of the Registry without, however, altering the standard form and contents.

3.8.2.1.4 Validating steps relative to the request for verification of subjective requirements

All requests for verification of subjective requirements, which contain errors or which lack identification data of the applicant, as well as the motivation, are rejected by the Registry with notification of the negative result to the e-mail address indicated in the request. Rejection occurs when:

- the domain name indicated in the request:
  - does not have the suffix ".it";
  - is not registered in the DBAN;
  - domain name is in the status of serverDeleteProhibited/serverUpdateProhibited/serverTransferProhibited, pendingTransfer, inactive/*clientHold*, inactive/*serverHold*, pendingDelete/*pendingDelete*, inactive/*toBeReassigned*, inactive/*revoked* or clientDeleteProhibited/clientUpdateProhibited/clientTranferProhibited;

- the content of the request for verification of subjective requirements is not legible;

- the request for verification of subjective requirements lacks compulsory data;

- the request for verification of subjective requirements shows an invalid motivation or not applicable to the type of verification required;

- the request is in a language other than Italian;

- before the signature at the bottom of the form, name and surname of the signatory is not specified, or it refers to a person other than the applicant.

3.8.2.1.5 Acceptance of the request for verification of subjective requirements

If the request received passes all validation steps referred to Section 3.8.2.1.4, the Registry activates the verification of subjective requirements procedure described in the following paragraph.

3.8.2.2 Activation of the verification of subjective requirements procedure

If the verification of subjective requirements is activated directly by the Registry or at the justified request of a third party, the Registry adds the values "serverDeleteProhibited/serverUpdateProhibited/serverTransferProhibited" to the domain name subject to the verification, prohibiting any operation on the domain name. This variation allows no alteration, in the DBAN, of any information regarding the domain name object of the verification of subjective requirements.

The Registry sends an e-mail to the Registrar associated with the domain name subject to the verification, giving notification of the aforementioned status. The Registry also sends a communication via PEC ("certified e-mail") or registered letter or express courier to the Registrant of the domain name, requesting documentation substantiating the identification data indicated in the DBAN, as well as the existence of the assignee.

The Registrant of the domain name has 10 (ten) working days, from receipt of the communication, to send to the Registry a copy of a valid ID document and a copy of their tax code, in case of natural person or, in case of subject other than a natural person, a similar document, for example the Chamber of Commerce Company registration number, proving the existence of the assignee, as well as the identification data indicated in the DBAN. The documentation can also be sent, within 10 (ten) working days, to the fax number +39 050 570230.

3.8.2.3 Assessment of the documents sent by the Registrant and conclusion of the verification

If the Registrant of the domain name subject to the verification of subjective requirements sends the documentation required, indicated in Section 3.8.2.2 of this document and this confirms the validity of the data in the DBAN, the Registry:

- eliminates the status of "serverDeleteProhibited/serverUpdateProhibited/serverTransferProhibited" previously associated with the domain name, thereby restoring the status preceding the start of the verification;

- communicates the conclusion of the verification by sending an e-mail both to the Registrar currently associated with the domain name and to the subject requesting the verification (to the e-mail address indicated in the verification request).

If the Registrant does not send the relevant documentation, referred to in Section 3.8.2.2 of this document, within the time limit or if the documentation sent does not substantiate the identification data indicated in the DBAN, as well as the existence of the assignee, the Registry revokes the domain name according to the specifications in Section 3.9.2.1 of this document. In this regard the Registry:

- communicates the conclusion of the verification by sending an e-mail:
  - o to the Registrant of the domain name subject to verification, to the address indicated in the DBAN;
  - o to the Registrar currently associated with the domain name;
  - o to the possible subject requesting the verification of subjective requirements, to the address indicated in the request;
- replaces the status of

"serverDeleteProhibited/serverUpdateProhibited/serverTransferProhibited" previously associated with the domain name subject to verification with the status inactive/*revoked*.

The domain names that are revoked due to lack of subjective requirements or due to failure to submit the documentation requested to the Registrant, remain in the status inactive/*revoked* for 30 (thirty) days after which they pass into pendingDelete/*pendingDelete* status for their permanent cancellation from the DBAN, according to the Drop Time process described in Section 3.7.2 of this document.

3.9   Revocation of a registered domain name

The Registry may revoke a domain name, even upon request of a competent Authority. A revoked domain name cannot be restored.

3.9.1   Revocation upon request of the competent Authority

The revocation of a domain name may be a result of a judicial or other decision issued by a competent Authority, which is in any case notified to the Registry in respect of the law.
The domain names revoked at the request of the competent Authority go into inactive/*revoked* status and remain in such status for 30 (thirty) days. After this period, the Registry puts these domain names into pendingDelete/*pendingDelete* status to be finally removed from the Database of the Registry, according to the Drop Time process described in Section 3.7.2 of this document.
In the event that a domain name revoked is the subject of an opposition (and thus is also in challenged status), after the above mentioned 30 (thirty) days, the domain name will go, instead, from inactive/*revoked* to inactive/*toBeReassigned* status.

3.9.2   Revocation by the Registry

3.9.2.1   In the absence of subjective requirements or failure to submit the required documents requested to the Registrant

The Registry may revoke a domain name in the absence of subjective requirements, that is if the Registrant no longer has the rights to the domain name or in the event the Registry has not received from the Registrant the required documentation (see Section 3.8.2).
The domain names automatically revoked by the Registry go from the status of serverDeleteProhibited/serverUpdateProhibited/serverTransferProhibited to inactive/*revoked* and remain in such status for 30 (thirty) days. After this period, the Registry puts these domain names into pendingDelete/*pendingDelete* status to be finally removed from the Registry Database, according to the Drop Time process described in Section 3.7.2 of this document.
In the event that a domain name revoked is the subject of an opposition (and thus is also in challenged status), after the above mentioned 30 (thirty) days, the domain name will go, instead, from inactive/*revoked* to inactive/*toBeReassigned* status.

3.10 Change to toBeReassigned status

At the end of a challenge and/or reassignment procedure that entails the assignment of a domain name to the subject that activated the challenge, the Registry passes the domain name into inactive/*toBeReassigned* status. The domain name can be assigned, within thirty days following the domain name's move into inactive/toBeReassigned status, only by the subject that made the challenge. Domain names in this status are not active as they are no longer delegated in the zone of the ccTLD.it.
The procedure to exit inactive/toBeReassigned is not synchronous. The new Registrant must send a written request to the Registry, following the forms set out in Sections 3.10.1 and 3.10.2, containing their personal data, the chosen Registrar, their contactID (which the Registrar should have already registered) and two authoritative nameservers for the domain name. Moreover, for each host subordinate to the domain name, it is necessary to specify the IPv4 address and in case

also the IPV6 address.

Each form is divided into four parts:

- the first part contains the following information:
  - o the domain name of the request. The table in Section 3.1.2.1 shows the restrictions on the domain name length and the characters accepted;
  - o if the new Registrant is a natural person, it includes:
    - their personal details and tax code;
  - o if the new Registrant is an entity other than a natural person, it includes:
    - the name and tax code of natural person, acting as representative of the new Registrant that endorses the request, the head office and related tax information;
  - o the identifier of the new Registrant (contactID);
  - o two authoritative nameservers for the domain name. The nameservers containing non-ASCII characters (see Section 2.2) must be specified in Punycode format (e.g.: "ns.xn--citt-3na.it" and not "ns.città.it"). For each host subordinated to the domain name, it is necessary to specify the IPv4 address and in case also the IPv6 address;
  - o the tag of the Registrar (REG tag);

- the second part is related to indemnity in case of a false statement;

- the third part contains:
  - o the place and date in which the document was produced;
  - o the signature of the natural person or of the legal representative of the Registrants;

- the fourth part is related to a disclosure on the protection and processing of personal data.

No variations to the forms mentioned above can be made. The Registrant must complete all the required fields for their particular "category", which are summarized in the table below.

Compilation of reassignment request of a domain name

Requested data	Domain names to be assigned to natural persons (without VAT number)	Domain names to be assigned to subjects other than natural persons	Notes
Name and surname of applicant and signatory of request	*Mandatory*	*Mandatory*	(1)
Place of birth	*Mandatory*	*Mandatory*	(2)
Date of birth	*Mandatory*	*Mandatory*	(3)
Residence	*Mandatory*	*"Not applicable"*	(4)
Tax code/ identity card	*Mandatory*	*Mandatory*	(5)
Business name	*"Not applicable"*	*Mandatory*	(6)
First name and surname of legal representative	*"Not applicable"*	*Mandatory*	
Legal residence	*"Not applicable"*	*Mandatory*	(7)
VAT number	*"Not applicable"*	*Mandatory*	(8)
New Registrant identifier (contactID)	*Mandatory*	*Mandatory*	(9)
Name and in case IP addresses of two authoritative nameservers for the domain name	*Mandatory*	*Mandatory*	(10)
Registrar tag	*Mandatory*	*Mandatory*	(11)
Signature of applicant	*Mandatory*	*Mandatory*	(12)

		Notes
(1)		Natural persons who have more than one first name and surname must give them all in full. No tags of first names or surnames are allowed.
(2)		The place of birth must also be given in full, including the province and/or foreign state.
(3)		The date of birth of the person (1) must be given in the format "dd-mm-yyyy".
(4)		The residence address of the person listed in (1) must be given. Natural persons residing outside Italy must give the country of residence.
(5)		Italian citizens must give their tax code. People in other countries of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation where there is not an equivalent of the tax code, must give the number of their identity document.
(6)		The complete company name of the Registrant of the domain name must be given (e.g. Pippo di Mario Rossi, Pippo sas di Mario Bianchi & c).
(7)		The address of the registered office must be given (street, city, province, post code, foreign state, if any) of the Registrant of the domain name listed in (6).
(8)		The VAT number or tax identification number of the Registrant of the domain name must be given. For associations that have no tax code number the date of incorporation must be indicated. For organizations that reside in a country of the European Economic Area (EEA) other than Italy, the Vatican City State, the Republic of San Marino or the Swiss Confederation, an equivalent must be provided (e.g.: tax code).
(9)		The identifier of the new Registrant (contactID) must be given.
(10)		The nameservers containing non-ASCII characters (see Section 2.2) must be given in the Punycode format (e.g.: "ns.xn--citt-3na.it" and not "ns.città.it"). The IP address must be indicated only in case of nameservers subordinated to the domain name. Then the IPv4 address in case also the IPv6 address must be inserted.
(11)		The tag of the new Registrar must be given.
(12)		The request must be signed by the person listed in (1).

For Registrants (natural and/or juridical persons) belonging to a member state of the European Economic Area (EEA) other than Italy, the Vatican City State, the Republic of San Marino or the Swiss Confederation the same principles are applied, except as foreseen by current legislation in the single member states.

3.10.1 Form for the registration of a domain name following a challenge and/or reassignment procedure: a natural person

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

Subject: reassignment request of the domain name _____.*IT*

The undersigned *(first name, surname)* born **in *(place of birth and [province or foreign state])*** on *(date of birth)* tax code number or identity document number *(tax code or number of identity card for foreign nationals not resident in Italy)*, contact code *(contactID)*, nameserver *(indicate name and possible IP addresses of two authoritative nameservers for the domain name)*, requests the Registry of the ccTLD.it the reassignment of the domain name in question via the Registrar _____ -REG *(new Registrar tag)*.

The undersigned is aware that the Registry will act by civil action and, where appropriate, criminal, in the case of a false statement. The undersigned also assumes the responsibility to hold harmless and indemnify the Registry in any case where the said misrepresentation causes damage to third parties.

Place, date

Request for reassignment by a natural person - Version 2018-01

<div align="right">

The undersigned
Name and Surname

_____

(Signature)

</div>

"Pursuant to art. 13.1 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of individuals with regard to the processing of personal data, the personal data provided by the applicants will be collected by the Institute of Informatics and Telematics, for the purposes strictly connected to the operation of reassignment of the domain name and will be processed in a database of the IIT for the execution of the operations related to the request itself as well as for the other purposes of the law, and if appropriate for the protection of rights. The Data Controller is the National Research Council, through the IIT - Registro. The data will be communicated to the other party or to the counter-parties and to third parties where required by law, by regulatory provision or by Community law, or, where appropriate, for the protection of rights. The supply of such data to the Institute of Informatics and Telematics of the CNR is mandatory for the evaluation of the request for access to personal data of the assignee of the domain name.
Pursuant to Article 15 of Reg. EU2016/679, the data subject has the right to obtain access to the personal data concerning himself or herself, to their rectification, integration or erasure, limitation or regarding opposition to their processing at any time, where there are legitimate reasons. The consent given may be revoked at any time. The data subject also has the possibility to make a complaint to the Supervisory Authority."

Notes:

1. In case of IDN domain names, the domain name must be indicated in native format and not in Punycode (e.g.: "città.it" and not "xn--citt-3na.it").

2. The nameservers containing non-ASCII characters (see Section 2.2) must be given in the Punycode format (e.g.: "ns.xn--citt-3na.it" and not "ns.città.it"). The IP address must be indicated only in case of nameservers subordinate to the domain name. Then the IPv4 address and in case the IPv6 address must be inserted.

3.10.2 Form for the registration of a domain name following a challenge and/or reassignment: subject other than a natural person

<div align="right">

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

</div>

Subject: reassignment request of the domain name _____*.IT*

The undersigned *(first name, surname)* born in *(place of birth and [province or foreign state])* on *(date of birth)* tax code number or identity document number *(tax code or number of identity card for foreign nationals not resident in Italy)*, delegated to represent in the present agreement the organization named *(corporate name)* with legal representative *(first name, surname)* with VAT number *(VAT number or tax code)* with registered office in *(address [street/square, locality, postal code, province or foreign state])*, contact code *(contactID)*, nameserver *(indicate name and possible IP addresses of two authoritative nameservers for the domain name)*, requests the Registry of the ccTLD.it that the domain name in question be assigned to the above-mentioned organization via the Registrar _____ -REG *(new Registrar tag)*.

The undersigned is aware that the Registry will act by civil action and, where appropriate, criminal, in the case of a false statement. The undersigned also assumes the responsibility to hold harmless and indemnify the Registry in any case where the said misrepresentation causes damage to third parties.

Place, date

Request for reassignment by a subject other than a natural person - Version 2018-01

The undersigned
Name and Surname

_____

(Signature)

"Pursuant to art. 13.1 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of individuals with regard to the processing of personal data, the personal data provided by the applicants will be collected by the Institute of Informatics and Telematics, for the purposes strictly connected to the operation of reassignment of the domain name and will be processed in a database of the IIT for the execution of the operations related to the request itself as well as for the other purposes of the law, and if appropriate for the protection of rights. The Data Controller is the National Research Council, through the IIT - Registro. The data will be communicated to the other party or to the counter-parties and to third parties where required by law, by regulatory provision or by Community law, or, where appropriate, for the protection of rights. The supply of such data to the Institute of Informatics and Telematics of the CNR is mandatory for the evaluation of the request for access to personal data of the assignee of the domain name.
Pursuant to Article 15 of Reg. EU2016/679, the data subject has the right to obtain access to the personal data concerning himself or herself, to their rectification, integration or erasure, limitation or regarding opposition to their processing at any time, where there are legitimate reasons. The consent given may be revoked at any time. The data subject also has the possibility to make a complaint to the Supervisory Authority."

Notes:

1. In case of IDN domain names, the domain name must be indicated in native format and not in Punycode (e.g.: "città.it" and not "xn--citt-3na.it").

2. The nameservers containing non-ASCII characters (see Section 2.2) must be given in the Punycode format (e.g.: "ns.xn--citt-3na.it" and not "ns.città.it"). The IP address must be indicated only in case of nameservers subordinate to the domain name. Then the IPv4 address and in case also theIPv6 address must be inserted.

3.10.3 Sending the registration request to the Registry

The request for registration can be sent to the Registry, by the new Registrant or by the Registrar, by post, courier or fax. We recommend sending it through the Registrar as this is the most efficient way in terms of management. Requests for registration sent by fax must only be sent to +39 050 542420. The requests for registration can be on several pages (A4) and of a size and format different from that given in the forms on the Registry website but no changes must be made to the wording and contents.
All requests for registration must be addressed to:

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1

I-56124 Pisa (Italy)

3.10.4 Tests for congruence of the data in the request

The Registry, upon a legible paper request for registration, checks that:

- the domain name given in the request:
  - ○ has the ".it" suffix;
  - ○ is registered in the Registry Database;
  - ○ is in inactive/*toBeReassigned* status;

- the new Registrant is the same one that activated the challenge;

- the identifier of the new Registrant (contactID) given in the request:
  - ○ is registered in the Database;
  - ○ is registered as a Registrant contact;
  - ○ has been registered by the Registrar set out in the request;
  - ○ is a new contactID;
  - ○ is not referenced as a Registrant of any domain name;

- there is a correspondence between the name of the Registrant listed in the request and that present in the registration of the Registrant in the Database, identified by the contactID also reported in the paper request;

- there is a correspondence between the VAT number or tax identification number of the new Registrant listed in the request and the VAT number or tax code in the registration of the Registrant in the Database, identified by the contactID that is also reported in the paper request;

- the Registrar reported in the request has an active contract with the Registry and transactions have not been suspended;

- two nameservers are specified;

- for each nameserver subordinate to the domain name at least the IPv4 address is specified;

- the hosts containing non-ASCII characters (see Section 2.2) are in Punycode format (e.g.: "ns.xn--citt-3na.it" and not "ns.città.it");

- all the mandatory fields have been filled in.

If the checks are not successful and the request is legible, the Registry sends the Registrar an email containing:

- the domain name;

- the inconsistencies;

- the date and time of receipt by the Registry of the registration request.

If the operation is not successful, the data in the Registry Database for the domain name in question remain the same. If after thirty days the Registrar has not sent a correct request, the Registry cancels the domain name and makes it freely available for assignment.

3.10.5 Conclusion of the operation

If the checks reveal no discrepancies, the Registry emails the Registrar with the following details:

- the domain name registered;

- the date and time of receipt of the request;

- the number of pages of the document received.

The Registry thus:

- changes the registration of the domain name by entering the reference of the new Registrar set out in the paper;

- generates the "AuthInfo" code for the domain name;

- emails the AuthInfo to the Registrar who, in turn, must notify the new Registrant;

- changes the Registrant of the domain name by inserting the reference of the new Registrant (contactID) listed in the paper request;

- associates the technical and administrative contacts of the domain name with the contactID of the Registrant;

- associates the domain name with the nameservers and, in case of hosts subordinate to the domain name, the IP addresses indicated in the request;

- changes the expiry date of the domain name;

- puts the domain name into **inactive/*dnsHold*** status, to be subjected to the validation of the DNS configuration;

- invoices the transaction to the new Registrar.

The Registrar can change the technical contact of the domain name as well as the administrative contact in cases where the Registrant is an entity other than natural person (see Section 3.2.2).

3.11 Renewal of a registered domain name

The validity period of one domain name is one year and is determined by the expiry date indicated in the *expire* field of the registration.
As the expiry is reached, the domain name is put in autoRenewPeriod, that is the status that identifies the 15 days following the expiry of the domain name.
During the 15 days provided for the auto renew period, the domain name can be subject to all the possible operations of maintenance foreseen by the registration system of the ccTLD .it.
As the expiry date is reached, the renewal fee is immediately charged to the current Registrar, if the domain name is in a status that permits it.
The invoicing of the operation, on the contrary, occurs after the 15 days period provided for the auto renew period. If during such period of time, the domain name is transferred to another Registrar or cancelled, the renewal fee is credited again to the Registrar and the operation is not invoiced. Otherwise, in the absence of one of the above operations of Registrar transfer or cancellation, the domain name is renewed by the Registry for the following 12 months.

3.12 Change to the statuses

3.12.1 Change to noRegistrar status

With the term noRegistrar the Registry identifies all those domain names managed by a Registrar who no longer has an active contract with the Registry. The Registry must inform the Registrant of each domain name managed by the Registrar that the contract has terminated.
There are three different statuses noRegistrar:

- ok/*noRegistrar* and inactive/*dnsHold*/*noRegistrar*: all the domain names of a Registrar who no longer has an active contract with the Registry and which have not yet expired. The domain names remain in ok/*noRegistrar* (or inactive/*dnsHold*/*noRegistrar*) status until they expire. Only the domain names that are in ok/*noRegistrar* status are delegated in the ccTLD .it zone;

- inactive/*noRegistrar*: all the domain names that have expired and for which the Registrar no

longer has an active contract with the Registry, plus all those domain names for which a change of the Registrar was not successful beyond the expiry of the "grace period". The domain names remain in inactive/*noRegistrar* status for a maximum period of 60 (sixty) days. After this period of time the domain names go in pendingDelete/*pendingDelete* status. The domain names that are in inactive/*noRegistrar* status are not delegated in the zone of the ccTLD .it.

In both cases, the only transactions allowed on the domain name are: the change of the Registrar (see Section 3.4), the change of the Registrar with the simultaneous change of the Registrant (see Section 3.5), the recovery (see Section 3.7.4) by the current Registrar in case his contract with the Registry is active.

As soon as the domain name is put in ok/*noRegistrar* or inactive/*dnsHold*/*noRegistrar* status, the Registry sends the Registrant an e-mail with the following format:

Subject: 10302 - Domain name <name of the domain> changing to <domain name status> status

We inform you that the domain name <name of the domain> assigned to the Registrant <Organization field of the Registrant contact> and maintained by <Registrar>, was put in <domain name status> status on <operation date>, because the Registrar <Registrar> no longer has a valid contract with the ccTLD .it Registry.
The Registrant of a domain name in <domain name status> status can request the reactivation of the domain name by means of an operation of modification of the Registrar or the recovery by the same Registrar, in case it has a new contract with the Registry, according to the specifications described in the Technical Guidelines.
In absence of one of the above described operations, at the expiry date of the domain name ("expire:" field of the "domain" object in the DBNA), the Registry will put the domain name in inactive/*noRegistrar* status and it will remain in this status for a maximum of 60 days.

For further information and details the Registrant may visit the website of the Registry at the URL http://www.nic.it.

Best regards,

Registro .it
Istituto di Informatica e Telematica
CNR - AREA DELLA RICERCA
Via Giuseppe Moruzzi, 1 - I-56124 PISA
Tel: +39 050 3139811
Fax: +39 050 3152713 (External Relations)
Email: hostmaster@nic.it

As soon as the domain name is put in inactive/*noRegistrar* status, the Registry sends the Registrant an e-mail with the following format:

Subject: 10303 - Domain name <name of the domain> changing to inactive/*noRegistrar* status

We inform you that the domain name <name of the domain> assigned to the Registrant <Organization field of the Registrant contact> and maintained by <Registrar> has been put in inactive/*noRegistrar* status on <operation date>.
The Registrant has 60 (sixty) days, from the <operation date>, to request, by means of his/her Registrar (<Registrar>), in case it has an active contract with the Registry, an operation of recovery from the inactive/*noRegistrar* status.

The Registrant may also request the reactivation of the domain name through a new Registrar, by means of an operation of modification of the Registrar according to the specifications described in the Technical Guidelines.

During the 60 day period, the Registry does not maintain active the delegations in the ccTLD .it zone for the authoritative nameservers of the domain name, therefore the domain name will no longer be accessible via the Internet.

If by the expiry date of the inactive/*noRegistrar* status, the operations above described have not been carried out for the domain name in object, the domain name will be put in pendingDelete/*pendingDelete* status for its definitive cancellation and removal from the DataBase of Assigned Domain Names (DBNA).

Should you need further information please contact your Registrar <Registrar>, or access the website of the Registry at the URL http://www.nic.it.

Best regards,

Registro .it
Istituto di Informatica e Telematica
CNR - AREA DELLA RICERCA
Via Giuseppe Moruzzi, 1 - I-56124 PISA
Tel: +39 050 3139811
Fax: +39 050 3152713 (External Relations)
Email: hostmaster@nic.it

3.12.2 Change to notRenewed status

The term *notRenewed* identifies all those domain names that were not automatically renewed because of the Registrar's low credit. If at the expiry of the period of validity of the domain name the Registrar has not enough credit for the renewal, the domain name goes into inactive/*notRenewed* status.

A domain name can come out of inactive/*notRenewed* status, as a result of:

- sufficient credit being made available for the renewal. The domain name, in this case, goes into:
  - ok or inactive/*dnsHold*, if the auto renew period is exceeded;
  - ok/autoRenewPeriod or inactive/*dnsHold/autoRenewPeriod*, if additional credit was made available before the domain name exceeded the autoRenewPeriod.

  In both cases renewal will be charged, but only billed in the first case;

- expiry of the maximum period, 30 (thirty) days, in inactive/*notRenewed*. The domain name in this case goes into pendingDelete/*pendingDelete* status;

- request to change the Registrar (with or without the simultaneous change of the Registrant). The domain name in this case goes into pendingTransfer status;

- request for cancellation. The domain name in this case goes into pendingDelete/*redemptionPeriod* status.

Note: The only transactions allowed in this status are: change of the Registrar (with or without the simultaneous change of Registrant), change to the constraints placed by the Registrar on the domain name, and deletion.
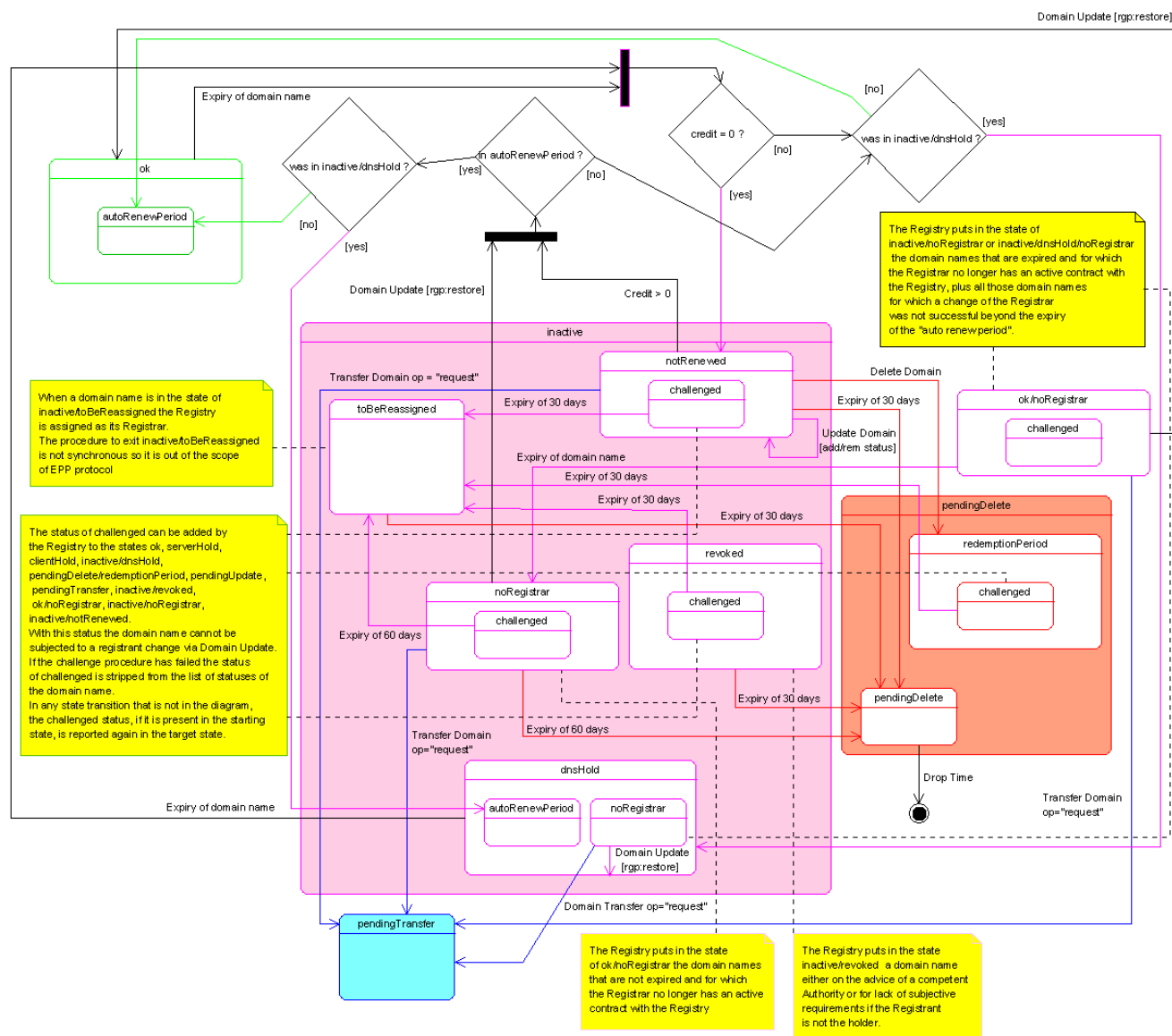
3.13 Change in Registrant data by the Registry

A Registrant can request the Registry to change or integrate some of the Registrant's data that is in the Registry Database. The change cannot, in any case, alter the assignee of the domain name.
The paper request for change of Registrant data must be formatted in accordance with the two forms specified in 3.13.1 and 3.13.2.
Each form is divided into four parts:

- the first part contains the following information:
  - the domain name of the request for change of Registrant data;
  - if the Registrant is a natural person, it includes:
    - their personal details and tax code;
  - if the Registrant is an entity other than a natural person, it includes:
    - the name and tax code of the person, acting as representative of the Registrant that endorses the request, the head office and related tax information of the Registrant of the domain name;
  - the tag of the current Registrar (REG tag) present in the registration;
  - the errors contained in the Registry Database and the reasons for such errors;

- the second part is related to indemnity in case of a false statement;

- the third part contains:
  - the place and date in which the request for the change of Registrant data was produced;
  - the signature of the applicant;

- the fourth part is related to a disclosure on the protection and processing of personal data.

No variations to the forms mentioned above can be made. The Registrant must complete all the required fields for their particular "category", which are summarized in the table below.

Compilation of the request for change in Registrant data

Data requested	Domain names assigned to natural persons (without VAT number)	Domain names assigned to entities other than natural persons	Notes
Name and surname of applicant and signatory of request	*Mandatory*	*Mandatory*	(1)
Place of birth	*Mandatory*	*Mandatory*	(2)
Date of birth	*Mandatory*	*Mandatory*	(3)
Residence	*Mandatory*	*Mandatory*	(4)
Tax code / identity card	*Mandatory*	*Mandatory*	(5)
Business name	*"Not applicable"*	*Mandatory*	(6)
First name and surname of legal representative	*"Not applicable"*	*Mandatory*	
Legal residence	*"Not applicable"*	*Mandatory*	(7)
VAT number	*"Not applicable"*	*Mandatory*	(8)
Registrar tag	*Mandatory*	*Mandatory*	(9)
Signature of applicant	*Mandatory*	*Mandatory*	(10)

	Notes
	Notes
(1)	Natural persons who have more than one first name and surname must give them all in full. No tags of first names or surnames are allowed.
(2)	The place of birth must also be given in full, including the province and/or foreign state.

(3)	The date of birth of the person (1) must be given in the format "dd-mm-yyyy".
(4)	The residence address of the person listed in (1) must be given. Natural persons residing outside Italy must give the country of residence.
(5)	Italian citizens must give their tax code. People in other countries of the European Economic Area (EEA), the Vatican City State, the Republic of San Marino or the Swiss Confederation where there is not an equivalent of the tax code, must give the number of their identity document.
(6)	The complete company name of the Registrant of the domain name must be given (e.g. Pippo di Mario Rossi, Pippo sas di Mario Bianchi & c).
(7)	The address of the registered office must be given (street, city, province, post code, foreign state, if any) of the Registrant of the domain name listed in (6).
(8)	The VAT number or tax identification number of the Registrant of the domain name must be given. For associations that have no tax code number the date of incorporation must be indicated. For organizations that reside in a country of the European Economic Area (EEA) other than Italy, the Vatican City State, the Republic of San Marino or the Swiss Confederation, an equivalent must be provided (e.g.: tax code).
(9)	The tag of the Registrar must be given.
(10)	The request must be signed by the person listed in (1).

For Registrants (natural and/or juridical persons) belonging to a member state of the European Economic Area (EEA) other than Italy, the Vatican City State, the Republic of San Marino or the Swiss Confederation the same principles are applied, except as foreseen by current legislation in the single member states.

3.13.1 Form for request for change in Registrant data by natural persons

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

Subject: change in Registrant data of the domain name _____*.IT*

The undersigned *(first name, surname)* born in *(place of birth and [province or foreign state])* on *(date of birth)* resident in *(address [street/square, locality, postal code, province or foreign state])* tax code number or identity document number *(tax code or number of identity card for foreign nationals not resident in Italy)*, Registrant of the domain name in question with Registrar _____-REG *(Registrar tag)* requests the change of Registrant data of the domain name specified in the request. The undersigned declares that due to an error *(specify reasons)* made when registering the domain name in question the following data were inserted incorrectly (specify which apply):
- *(first name, surname)*
- *(residence address [street/square, locality, postal code, province or foreign state])*
- *(tax code or number of identity card for foreign nationals not resident in Italy)*,
- *(type of Registrant – i.e. EntityType)*
- *(Nation)*
- *(Nationality)*

The undersigned encloses with the present documentation, proof of the authenticity of the data reported above.
The undersigned is aware that the Registry will act by civil action and, where appropriate, criminal, in the case of a false statement. The undersigned also assumes the responsibility to hold harmless and indemnify the Registry in any case where the said misrepresentation causes damage to third parties.

Place, date

Form for request for change in Registrant data by natural persons – Version 2018-01

<div align="right">

The undersigned
First name and surname

_____
(Signature)

</div>

"Pursuant to art. 13.1 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of individuals with regard to the processing of personal data, the personal data provided by the applicants will be collected by the Institute of Informatics and Telematics, for the purposes strictly connected to the operation of change in Registrant data of the domain name and will be processed in a database of the IIT for the execution of the operations related to the request itself as well as for the other purposes of the law, and if appropriate for the protection of rights. The Data Controller is the National Research Council, through the IIT - Registro. The data will be communicated to the other party or to the counter-parties and to third parties where required by law, by regulatory provision or by Community law, or, where appropriate, for the protection of rights. The supply of such data to the Institute of Informatics and Telematics of the CNR is mandatory for the evaluation of the request for access to personal data of the assignee of the domain name.
Pursuant to Article 15 of Reg. EU2016/679, the data subject has the right to obtain access to the personal data concerning himself or herself, to their rectification, integration or erasure, limitation or regarding opposition to their processing at any time, where there are legitimate reasons. The consent given may be revoked at any time. The data subject also has the possibility to make a complaint to the Supervisory Authority."

3.13.2 Form for request for change in Registrant data by entities other than natural persons

<div align="right">

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

</div>

Subject: change in Registrant data of the domain name _____*.IT*

The undersigned (***first name, surname***) born in (***place of birth and [province or foreign state]***) on (***date of birth***) resident in (***address [street/square, locality, postal code, province or foreign state]***) tax code number or identity document number (***tax code or number of identity card for foreign nationals not resident in Italy***), Registrant of the domain name in question with Registrar ____-REG (***Registrar tag***) requests the change of Registrant data of the domain name specified in the request. The undersigned declares that due to an error *(specify reasons)* made when registering the domain name in question the following data were inserted incorrectly (specify which apply):

- (***first name, surname***)
- (***residence address [street/square, locality, postal code, province or foreign state]***)
- (***tax code or number of identity card for foreign nationals not resident in Italy***),
- (***type of Registrant – i.e. EntityType***)
- (***Nation***)
- (***Nationality***)

The undersigned encloses with the present documentation, proof of the authenticity of the data reported above.
The undersigned is aware that the Registry will act by civil action and, where appropriate,

criminal, in the case of a false statement. The undersigned also assumes the responsibility to hold harmless and indemnify the Registry in any case where the said misrepresentation causes damage to third parties.

Place, date

Form for request for change in Registrant data by entities other than natural persons – Version 2018-01

The undersigned
First name and surname

_____
(Signature)

"Pursuant to art. 13.1 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of individuals with regard to the processing of personal data, the personal data provided by the applicants will be collected by the Institute of Informatics and Telematics, for the purposes strictly connected to the operation of change in Registrant data of the domain name and will be processed in a database of the IIT for the execution of the operations related to the request itself as well as for the other purposes of the law, and if appropriate for the protection of rights. The Data Controller is the National Research Council, through the IIT - Registro. The data will be communicated to the other party or to the counter-parties and to third parties where required by law, by regulatory provision or by Community law, or, where appropriate, for the protection of rights. The supply of such data to the Institute of Informatics and Telematics of the CNR is mandatory for the evaluation of the request for access to personal data of the assignee of the domain name.
Pursuant to Article 15 of Reg. EU2016/679, the data subject has the right to obtain access to the personal data concerning himself or herself, to their rectification, integration or erasure, limitation or regarding opposition to their processing at any time, where there are legitimate reasons. The consent given may be revoked at any time. The data subject also has the possibility to make a complaint to the Supervisory Authority."

3.13.3 Sending the request for change in Registrant data to the Registry

The request for change in Registrant data can be sent to the Registry, by the Registrant or by the Registrar, by post, courier or fax.
We recommend sending it through the Registrar as this is the most efficient way in terms of management.
The request for change in Registrant data can be on several pages (A4) and of a size and format different from that given in the forms on the Registry website but no changes must be made to the wording and contents.
All requests for change in Registrant data must be addressed to:

Registro .it
Istituto di Informatica e Telematica del CNR
Via Giuseppe Moruzzi, 1
I-56124 Pisa (Italy)

Requests for change in Registrant data sent by fax must only be sent to the following number:
+39 050 542420.

3.13.4 Notification for change in Registrant data

The Registry shall email the Registrar and the Registrant (where there is an Email field of the "contact" object associated with the Registrant), to confirm the changes based on requests received. The e-mail will be sent if the data necessary for sending are readable. Requests for

changes of Registrant data, entail the amendment in the Registry Database, of the data of the Registrant for the domain name specified in the request.

The notification e-mail sent to the Registrar and the Registrant will include:

- the domain name;

- the date and time of receipt of the request for change in Registrant data;

- the tag of the Registrar (REG tag);

- the number of pages of the document received;

- any reasons for rejection of the request for correction of the error.

All requests for changes in Registrant data that are inaccurate or do not contain the essential data, will be rejected by giving notice of the negative outcome to the Registrar and the Registrant (where there is an Email field of the "contact" object associated with the Registrant), and the data in the Registry Database for the domain name specified will be left unchanged. The e-mail will be sent if the data necessary for sending are readable.

This notification will be sent in cases where:

- the domain name is in pendingDelete/*pendingDelete*, pendingDelete/*redemptionPeriod*, inactive/*revoked*, inactive/*clientHold*, inactive/*serverHold*, clientUpdateProhibited, serverUpdateProhibited, pendingTransfer, pendingTransfer/*bulk*;

- the person/entity who requested the change is different from the Registrant listed in the Database of the Registry;

- the tax code or VAT number reported in the request is different from that in the RegCode field, if present;

- the content of the request for change is not legible;

- the request for correction is devoid of the data required;

- the data required in the request for change are reported incorrectly or incomplete;

- the wording/form of the request form, as originally made available by the Registry, has been altered;

- the application is written in a language other than Italian;

- before the signature at the bottom of the request for change the first name and surname of the signee is not specified, or is related to a person other than the applicant.

3.13.5 Operational activation for change in Registrant data

If all checks are successful, the Registry concludes the process of changing the data, by changing the Registrant data in the Database. Upon loading the new data in the Database an e-mail will be sent to the Registrar and the Registrant (where there is an Email field of the "contact" object associated with the Registrant).

4 Commands for querying the server

The EPP protocol provides clients with commands to query the server. There is a distinction between:

- commands that query the server about the status of objects in the Registry Database, i.e. Check, Info, and Transfer Query commands:

  o the Check command allows a client to determine whether an object or domain contact is in the Database Registry, and thus whether or not it is available for registration. This command can be sent by any Registrar;

  o the Info command allows a client to obtain information about contact or domain in the Database and to display the current value of the property of the object including the current status, or relations with other objects (e.g. what contacts are associated - for various roles - with a registered domain name). This command can only be sent by the Registrar that manages the object; and for domain objects only, also by the Registrar that holds the AuthInfo;

  o the Transfer Query command allows a client to see the status of a request to change the current Registrar or the last change of the Registrar (to which an object has been submitted). This command is applicable only for domain objects because in the synchronous implementation of the Registry, contact objects cannot be transferred. This command can only be sent by the Registrar who currently manages the domain name, or by the Registrar who, in the case of a current request to change the Registrar, holds the AuthInfo (typically the Registrar that sent the request, i.e. the new Registrar);

- commands that query the server on the presence of messages in the client's polling queue, i.e. Poll Req and Poll Ack commands (see Sections 4.3 and 6.7).

4.1 Queries on contact objects

The format of the Check Contact command provides that the client may send in their request a list of contact IDs (up to a maximum number determined by the policies of the server and corresponding to the MAX_CHECK parameter described in "6.11 Other useful parameters"). In its response the server reports, for each identifier in the request, whether it can be used or not in a registration.

4.1.1 Check Contact

4.1.1.1 Example of request to Check Contact

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
<command>
 <check>
  <contact:check xmlns:contact="urn:ietf:params:xml:ns:contact-1.0">
     <contact:id>mm001</contact:id>
     <contact:id>mb001</contact:id>
     <contact:id>cl001</contact:id>
     <contact:id>bb001</contact:id>
   </contact:check>
  </check>
  <clTRID>ABC-12345</clTRID>
 </command>
</epp>
```

4.1.1.2 Example of a response to a Check Contact request

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
       <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <contact:chkData>
       <contact:cd>
          <contact:id avail="false">MM001</contact:id>
       </contact:cd>
       <contact:cd>
          <contact:id avail="false">MB001</contact:id>
       </contact:cd>
       <contact:cd>
          <contact:id avail="true">CL001</contact:id>
       </contact:cd>
       <contact:cd>
          <contact:id avail="true">BB001</contact:id>
       </contact:cd>
      </contact:chkData>
    </resData>
    <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>fa0d0881-cdba-41c1-8f73-d8e52f69b2cc</svTRID>
    </trID>
  </response>
</epp>
```

4.1.2 Info Contact

The command Info Contact requires that the client can send only one contact identifier for which to request information. The contact object, identified by the ID specified in the command must be present in the Registry Database and must be currently associated with the client who submits the request: if not, the server returns an error.

The server, in its response, returns the information of the object deriving from registration and change commands submitted by the client, including any extensions in addition to those assigned automatically by the system.

The following table shows additional contact object fields and their correspondence with the XML tags:

Field	Description	XML Tag	XML Tag Attribute	Cardinality	Length	Notes
ROID (Repository Object Identifier)	Contact unambiguous identifier in the Registry database	contact:roid				Assigned automatically by the system
Creation date	Contact first registration date and time	contact:crDate				Assigned automatically by the system
Current client ID	Current registrar	contact:clID				Assigned

						automatically by the system
Client ID who made the creation	Registrar who made the contact registration	contact:crID				Assigned automatically by the system
Client ID who made the modification	Registrar who modified the contact	contact:upID				Assigned automatically by the system and visible only if the contact has been modified
Update date	Last contact modification date and time	contact:upDate				Assigned automatically by the system
Status	Identifies the statuses that the contact is in	contact:status				The default value, assigned by the system at the registration of the contact in the Registry Database, is ok. When the contact is referenced in the domain name registration, it goes into ok/*linked*

4.1.2.1 Example of Info Contact request

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <info>
      <contact:info
       xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:contact-1.0 contact-
1.0.xsd">
        <contact:id>MISSING001</contact:id>
      </contact:info>
    </info>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

4.1.2.2 Examples of responses for Info Contact request

Example 1

A response to an Info Contact request relating to a contract that has not yet been registered in the Registry Database:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
```

```
xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
xmlns="urn:ietf:params:xml:ns:epp-1.0">
<response>
  <result code="2303">
    <msg lang="en">Object does not exist</msg>
    <value>
      <extepp:wrongValue>
        <extepp:element>id</extepp:element>
        <extepp:namespace>urn:ietf:params:xml:ns:contact-
1.0</extepp:namespace>
        <extepp:value>MISSING001</extepp:value>
      </extepp:wrongValue></value>
    <extValue>
      <value>
        <extepp:reasonCode>9003</extepp:reasonCode>
      </value>
      <reason lang="en">Contact does not exist</reason>
    </extValue>
  </result>
  <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>48b7d02d-eeee-4292-8822-4ae089f47be4</svTRID>
  </trID>
</response>
</epp>
```

Example 2

Response to an Info Contact relating to a contact registered by a different Registrar from the one who submitted the request:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
 <response>
  <result code="2201">
    <msg lang="en">Authorization error</msg>
    <extValue>
      <value>
      <extepp:reasonCode>6001</extepp:reasonCode>
      </value>
      <reason lang="en">Lack of permissions to process command
      </reason>
    </extValue>
  </result>
  <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>f913c565-e954-4c74-a4c1-754397f5e171</svTRID>
  </trID>
 </response>
</epp>
```

Example 3

Response to an Info Contact regarding a "tech" contact:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
     <contact:infData>
     <contact:id>TECH001</contact:id>
     <contact:roid>ITNIC-8</contact:roid>
     <contact:status s="ok" lang="en" />
     <contact:status s="linked" lang="en" />
     <contact:postalInfo type="loc">
     <contact:name>Mirco Bartolini</contact:name>
     <contact:org>Demo Registrar Srl</contact:org>
     <contact:addr>
     <contact:street>via 4 Novembre,12</contact:street>
     <contact:city>Barga</contact:city>
     <contact:sp>LU</contact:sp>
     <contact:pc>55052</contact:pc>
     <contact:cc>IT</contact:cc>
     </contact:addr>
     </contact:postalInfo>
     <contact:voice x="">+39.0583123456</contact:voice>
     <contact:fax x="">+39.058375124</contact:fax>
     <contact:email>mirco.bartolini@hotmail.it</contact:email>
     <contact:clID>DEMO-REGISTRAR</contact:clID>
     <contact:crID>DEMO-REGISTRAR</contact:crID>
     <contact:crDate>2013-02-19T14:46:35+01:00</contact:crDate>
     <contact:upID>DEMO-REGISTRAR</contact:upID>
     <contact:upDate>2013-03-21T12:35:51+01:00</contact:upDate>
     </contact:infData>
    </resData>
   <extension>
   <extcon:infData>
    <extcon:consentForPublishing>true</extcon:consentForPublishing>
   </extcon:infData>
 </extension>
 <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>bd336711-a0d5-443c-812b-cadb2d3431b3</svTRID>
  </trID>
 </response>
</epp>
```

Example 4
Response to an Info Contact regarding a "registrant" contact:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
```

```
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
<response>
<result code="1000">
     <msg lang="en">Command completed successfully</msg>
</result>
<resData>
<contact:infData>
  <contact:id>MR0001</contact:id>
  <contact:roid>ITNIC-24</contact:roid>
  <contact:status s="ok" lang="en" />
  <contact:status s="linked" lang="en" />
  <contact:postalInfo type="loc">
  <contact:name>Mario Rossi</contact:name>
  <contact:org>NIC-IT Inc.</contact:org>
  <contact:addr>
    <contact:street>via Moruzzi,1</contact:street>
    <contact:city>Pisa</contact:city>
    <contact:sp>PI</contact:sp>
    <contact:pc>56124</contact:pc>
    <contact:cc>IT</contact:cc>
  </contact:addr>
  </contact:postalInfo>
  <contact:voice x="2111">+39.050315</contact:voice>
  <contact:fax x="">+39.0503152593</contact:fax>
  <contact:email>mario.rossi@esempio.it</contact:email>
  <contact:clID>DEMO-REGISTRAR</contact:clID>
  <contact:crID>DEMO-REGISTRAR</contact:crID>
  <contact:crDate>2013-02-27T11:28:32+01:00</contact:crDate>
  <contact:upID>DEMO-REGISTRAR</contact:upID>
  <contact:upDate>2013-02-29T12:28:22+01:00</contact:upDate>
</contact:infData>
</resData>
<extension>
<extcon:infData>
  <extcon:consentForPublishing>true</extcon:consentForPublishing>
  <extcon:registrant>
    <extcon:nationalityCode>IT</extcon:nationalityCode>
    <extcon:entityType>1</extcon:entityType>
    <extcon:regCode>RSSMRA64C14G702Q</extcon:regCode>
  </extcon:registrant>
</extcon:infData>
</extension>
<trID>
   <clTRID>ABC-12345</clTRID>
   <svTRID>fccc34cc-b26d-4fa8-be0d-af08eb33c549</svTRID>
</trID>
</response>
</epp>
```

4.2   Queries on domain objects

4.2.1   Check Domain

The command Check Domain allows the client to send a list of domain names (up to a maximum number determined by the policies of the server and corresponding to the MAX_CHECK

parameter described in "6.11 Other useful parameters"). The server, for each domain name listed in the request, indicates whether it can be inserted or not in a registration request and, if not, the reason (e.g. it is already present in the Registry Database or it is reserved).

4.2.1.1 Example of a Check Domain request

```xml
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <check>
      <domain:check
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>example1.it</domain:name>
        <domain:name>example2.it</domain:name>
        <domain:name>example3.it</domain:name>
      </domain:check>
    </check>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

4.2.1.2 Example of a response to a Check Domain request

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
   <result code="1000">
      <msg lang="en">Command completed successfully</msg>
   </result>
   <resData>
    <domain:chkData>
     <domain:cd>
      <domain:name avail="false">esempio1.it</domain:name>
      <domain:reason lang="en">Domain is registered</domain:reason>
     </domain:cd>
     <domain:cd>
      <domain:name avail="false">esempio2.it</domain:name>
      <domain:reason lang="en">Domain is registered</domain:reason>
     </domain:cd>
     <domain:cd>
       <domain:name avail="true">esempio3.it</domain:name>
     </domain:cd>
    </domain:chkData>
   </resData>
   <trID>
     <clTRID>ABC-12345</clTRID>
     <svTRID>20fd2709-5ed6-4091-89a3-826f703e10b9</svTRID>
   </trID>
  </response>
</epp>
```

4.2.2   Info Domain

The Info Domain command allows the client to request information for a single domain name. The object domain associated with the domain name specified must be present in the Registry Database, and the client who submits the application must be the one currently associated with the domain name or another client in possession of the AuthInfo: otherwise the server will send a response error.

The command in question can be sent to the server of the Registry with the "InfContacts" extension. In this case the command must necessarily contain, not only the domain name, but also the AuthInfo currently associated with the domain name, otherwise the server will send an error message.

The use of this extension allows the client to view the information contained in the Database of the Registry for the domain name for which the command was submitted, as well as the data associated with the contacts referenced in the domain name.

The "infContacts" extension can take on the following values:

- *registrant*: allows the client to obtain information about the Registrant;

- *admin*: allows the client to obtain information about the administrative contact;

- *tech*: allows the client to obtain information about the technical contacts;

- *all*: allows the client to obtain information about all the contacts referenced in the domain name, that is, the "registrant", "admin" and "tech" contact types.

Paragraphs 4.2.2.1 and 4.2.2.2 contain, respectively, some examples of Info Domain requests without the use of the "infContacts" extension and some examples of response sent by the server to that type of request.

Paragraphs 4.2.2.3 and 4.2.2.4 contain, respectively, some examples of info Domain requests containing the extension "infContacts" and the responses of the server.

The server, in its response, returns the information of the object deriving from registration and change commands submitted by the client, including any extensions in addition to those assigned automatically by the system.

The response can contain four extensions:

- **extdom:infData** contains the NIC-It statuses, which along with the standards described in the domain-1.0.xsd schema, describe the status of the domain in question. The statuses are described in the extdom-2.0.xsd (tag: **extdom:ownStatus**) schema.

- **rgp:infData** contains the statuses belonging to the extension of the protocol for the grace period, which along with the standards described in the domain-1.0.xsd schema, describe the status of the domain in question. The statuses are described in the rgp-1.0.xsd (tag **rgp:rgpStatus**) schema.

- **extdom:infNsToValidateData** contains the most recent DNS configuration of the verified domain:
  - if the domain is in inactive/dnsHold, since there is no configuration present that has been verified as correct, the response contains only this information with regard to the name servers associated with the domain.
  - if the domain is in pendingUpdate, the response contains both the most recent configuration that has been verified as being correct (in the domain:ns section) and the most recently verified configuration;

- **extdom:infContactsData** contains the information about the tech, admin e registrant contacts (the same one of the Contact Info response) according to value of op attribute selected in the related request.

The following table shows additional fields of the domain object and the related correspondence

with the XML tags:

Field	Description	XML Tag	XML Tag Attribute	Cardinality	Notes
ROID (Repository Object Identifier)	Domain name unambiguous identifier in the Registry database	domain:roid			Assigned automatically by the system
Creation date	Domain name first registration date and time	domain:crDate			Assigned automatically by the system
Current client ID	Current Registrar	domain:clID			Assigned automatically by the system
Client ID who made the creation	Registrar who made the domain name registration	domain:crID			Assigned automatically by the system
Client ID who made the modification	Registrar who modified the domain name registration	domain:upID			Assigned automatically by the system and visible only if the domain name has been modified
Expiry date	Domain name expiry date and time	domain:exDate			Automatically updated by the system at the maintenance period expiration date (a year)
Update date	Domain name last modification date and time	domain:upDate			Assigned automatically by the system
Transfer date	Registrar modification operation end date and time	domain:trDate			Assigned automatically by the system and visible only if the Registrar of the domain name has been modified
Status	Identifies the statuses that the contact is in	domain:status			At the registration of the domain name in the Registry Database, the domain name is put in inactive/*dnsHold* status

Section 5.9 contains examples of Info Domain requests on a digitally signed domain name.

4.2.2.1   Examples of an Info Domain request without extension "infContacts"

Example 1
Info Domain request submitted by the Registrar of a domain (and thus without AuthInfo)

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <info>
      <domain:info
```

```
xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
      xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name hosts="all">example.it</domain:name>
      </domain:info>
    </info>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

Example 2

Domain Info request submitted by a Registrar who is different from the one in the domain name registration. In this case the Registrar must insert the value of the AuthInfo currently associated with the domain name:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <info>
      <domain:info
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name hosts="all">example.it</domain:name>
        <domain:authInfo>
           <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:info>
    </info>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

4.2.2.2   Examples of responses to an Info Domain request without extension "infContacts"

Example 1

Response to a Domain Info request for a domain name not yet registered in the Registry Database:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="2202">
      <msg lang="en">Invalid authorization information</msg>
      <value>
       <extepp:wrongValue>
          <extepp:element>name</extepp:element>
          <extepp:namespace>urn:ietf:params:xml:ns:domain-
1.0</extepp:namespace>
          <extepp:value>missing.it</extepp:value>
```

```
        </extepp:wrongValue>
      </value>
      <extValue>
        <value>
         <extepp:reasonCode>9085</extepp:reasonCode>
        </value>
      <reason lang="en">Invalid domain authorization information or
domain does not exist</reason>
      </extValue>
    </result>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>88b45952-b85d-4363-98f3-7917ebc06090</svTRID>
    </trID>
  </response>
</epp>
```

Example 2
Response to a Domain Info request submitted by a Registrar who maintains the domain name or
by a different Registrar who holds the AuthInfo:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
       <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:infData>
       <domain:name>esempio.it</domain:name>
       <domain:roid>ITNIC-666</domain:roid>
       <domain:status s="ok" lang="en" />
       <domain:registrant>REG001</domain:registrant>
       <domain:contact type="admin">REG001</domain:contact>
       <domain:contact type="tech">TECH001</domain:contact>
       <domain:ns>
        <domain:hostAttr>
         <domain:hostName>ns1.esempio.it</domain:hostName>
         <domain:hostAddr ip="v4">192.0.2.1</domain:hostAddr>
        </domain:hostAttr>
        <domain:hostAttr>
         <domain:hostName>ns2.esempio.it</domain:hostName>
         <domain:hostAddr ip="v4">192.0.2.2</domain:hostAddr>
        </domain:hostAttr>
       </domain:ns>
       <domain:host>ns1.esempio.it</domain:host>
       <domain:host>ns2.esempio.it</domain:host>
       <domain:clID>DEMO-REGISTRAR</domain:clID>
       <domain:crID>DEMO-REGISTRAR</domain:crID>
       <domain:crDate>2013-02-21T15:18:12+01:00</domain:crDate>
       <domain:upID>DEMO-REGISTRAR</domain:upID>
       <domain:upDate>2013-03-12T16:21:08+01:00</domain:upDate>
```

```
            <domain:exDate>2014-02-21T23:59:59+01:00</domain:exDate>
            <domain:authInfo>
               <domain:pw>22fooBAR</domain:pw>
            </domain:authInfo>
      </domain:infData>
   </resData>
   <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>fd505964-ddac-4b21-b2b6-54423be597d3</svTRID>
   </trID>
 </response>
</epp>
```

Example 3

Response to a Domain Info request submitted by a Registrar at the termination of a change of the
Registrar. Note the presence of duplicated contacts and the date of transfer.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
       <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:infData>
        <domain:name>esempio.it</domain:name>
        <domain:roid>ITNIC-666</domain:roid>
        <domain:status s="ok" lang="en" />
        <domain:registrant>DUP679000001</domain:registrant>
        <domain:contact type="admin">DUP679000001</domain:contact>
        <domain:contact type="tech">DUP142000001</domain:contact>
        <domain:ns>
          <domain:hostAttr>
            <domain:hostName>ns1.esempio.it</domain:hostName>
            <domain:hostAddr ip="v4">192.0.2.1</domain:hostAddr>
          </domain:hostAttr>
          <domain:hostAttr>
            <domain:hostName>ns2.esempio.it</domain:hostName>
            <domain:hostAddr ip="v4">192.0.2.2</domain:hostAddr>
          </domain:hostAttr>
        </domain:ns>
        <domain:host>ns1.esempio.it</domain:host>
        <domain:host>ns2.esempio.it</domain:host>
        <domain:clID>NEW-REGISTRAR</domain:clID>
        <domain:crID>DEMO-REGISTRAR</domain:crID>
        <domain:crDate>2013-02-21T15:18:12+01:00</domain:crDate>
        <domain:upID>NEW-REGISTRAR</domain:upID>
        <domain:upDate>2013-02-25T07:54:50+01:00</domain:upDate>
        <domain:exDate>2014-02-25T23:59:59+01:00</domain:exDate>
        <domain:trDate>2014-02-25T23:59:59+01:00</domain:trDate>
        <domain:authInfo>
           <domain:pw>22fooBAR</domain:pw>
```

```
        </domain:authInfo>
      </domain:infData>
    </resData>
    <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>b70fa9c1-23cf-4efb-836a-bed359802d95</svTRID>
    </trID>
  </response>
</epp>
```

Example 4

Response to an Info Domain request on a domain name that is in inactive/*dnsHold* status.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
        <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:infData>
        <domain:name>esempio.it</domain:name>
        <domain:roid>ITNIC-40</domain:roid>
        <domain:status s="inactive" lang="en" />
        <domain:registrant>MM001</domain:registrant>
        <domain:contact type="admin">MM001</domain:contact>
        <domain:contact type="tech">MB001</domain:contact>
        <domain:clID>DEMO-REGISTRAR</domain:clID>
        <domain:crID>DEMO-REGISTRAR</domain:crID>
        <domain:crDate>2013-07-04T13:03:15+02:00</domain:crDate>
        <domain:upID>DEMO-REGISTRAR</domain:upID>
        <domain:upDate>2013-07-07T14:00:10+02:00</domain:upDate>
        <domain:exDate>2014-07-04T23:59:59+02:00</domain:exDate>
        <domain:authInfo>
           <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:infData>
    </resData>
    <extension>
      <extdom:infData>
          <extdom:ownStatus lang="en" s="dnsHold"/>
      </extdom:infData>
      <extdom:infNsToValidateData>
       <extdom:nsToValidate>
        <domain:hostAttr>
           <domain:hostName>ns1.esempio.it</domain:hostName>
        </domain:hostAttr>
        <domain:hostAttr>
           <domain:hostName>ns2.esempio.it</domain:hostName>
        </domain:hostAttr>
        <domain:hostAttr>
           <domain:hostName>dns.dominio.net</domain:hostName>
        </domain:hostAttr>
```

```
            <domain:hostAttr>
                <domain:hostName>dns.dominio.com</domain:hostName>
            </domain:hostAttr>
         </extdom:nsToValidate>
       </extdom:infNsToValidateData>
     </extension>
     <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>38ac1a72-c80b-4b0d-8ba1-654770a1e23c</svTRID>
     </trID>
   </response>
</epp>
```

4.2.2.3 Examples of Info Domain request with extension "infContacts"

Info Domain request submitted by a Registrar to visualize the data relating to the domain name esempio.it and associated Registrant. In this case the Registrar must insert the AuthInfo value currently associated with the domain name:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
     <info>
      <domain:info
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
         <domain:name hosts="all">esempio.it</domain:name>
         <domain:authInfo>
            <domain:pw>22fooBAR</domain:pw>
         </domain:authInfo>
       </domain:info>
     </info>
  <extension>
   <extdom:infContacts op="registrant"
     xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
     xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-2.0
     extdom-2.0.xsd"/>
  </extension>
     <clTRID>ABC-12345</clTRID>
   </command>
</epp>
```

In order to visualize the details of all the contacts referenced in the registration of the domain name it is enough to add the value "all" to the extension *infContacts*, as indicated below:

```
<extension>
  <extdom:infContacts op="all"
     xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
     xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-2.0
     extdom-2.0.xsd"/>
</extension>
```

Similarly, to visualize the technical or administrative contact, the Registrar must send an Info Domain request where the value of the extension *infContacts* is "tech" or "admin".

4.2.2.4 Examples of response to an Info Domain request with extension "infContacts"

Example 1

Response to an Info Domain request, relating to the domain name esempio.it, submitted by the Registrar with the extension infContacts op="registrant". In this case the server, in addition to the information relating to the domain name, also returns the data associated with the "registrant" contact type referenced in it:

```
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:infData>
        <domain:name>esempio.it</domain:name>
        <domain:roid>ITNIC-162761</domain:roid>
        <domain:status lang="en" s="ok"/>
        <domain:registrant>MR0001</domain:registrant>
        <domain:contact type="admin">MR0001</domain:contact>
        <domain:contact type="tech">TECH001</domain:contact>
        <domain:contact type="tech">TECH002</domain:contact>
        <domain:ns>
          <domain:hostAttr>
            <domain:hostName>ns1.esempio.it</domain:hostName>
           <domain:hostAddr ip="v4">193.205.245.6</domain:hostAddr>
          </domain:hostAttr>
          <domain:hostAttr>
            <domain:hostName>ns2.esempio.it</domain:hostName>
           <domain:hostAddr ip="v4">193.205.245.7</domain:hostAddr>
          </domain:hostAttr>
        </domain:ns>
        <domain:host>ns1.esempio.it</domain:host>
        <domain:host>ns2.esempio.it</domain:host>
        <domain:clID>DEMO-REG</domain:clID>
        <domain:crID>DEMO-REG</domain:crID>
       <domain:crDate>2013-01-24T16:41:53.000+01:00</domain:crDate>
       <domain:exDate>2014-01-24T16:41:53.000+01:00</domain:exDate>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:infData>
    </resData>
    <extension>
      <extdom:infContactsData>
        <extdom:registrant>
          <extdom:infContact>
            <contact:id>MR0001</contact:id>
            <contact:roid>ITNIC-326982</contact:roid>
            <contact:status lang="en" s="ok"/>
            <contact:status lang="en" s="linked"/>
            <contact:postalInfo type="loc">
              <contact:name>Mario Rossi</contact:name>
              <contact:org>Mario Rossi</contact:org>
```

```
            <contact:addr>
              <contact:street>Via Moruzzi, 1</contact:street>
              <contact:city>Pisa</contact:city>
              <contact:sp>PI</contact:sp>
              <contact:pc>56100</contact:pc>
              <contact:cc>IT</contact:cc>
            </contact:addr>
          </contact:postalInfo>
          <contact:voice x="">+39.050315111</contact:voice>
          <contact:fax x="">+39.050315111</contact:fax>
          <contact:email>mario.rossi@esempio.it</contact:email>
          <contact:clID>DEMO-REG</contact:clID>
          <contact:crID>DEMO-REG</contact:crID>
         <contact:crDate>2013-01-24T16:41:53.000+01:00</contact:crDate>
         </extdom:infContact>
         <extdom:extInfo>
        <extcon:consentForPublishing>true</extcon:consentForPublishing>
           <extcon:registrant>
             <extcon:nationalityCode>IT</extcon:nationalityCode>
             <extcon:entityType>1</extcon:entityType>
             <extcon:regCode>RSSMRA64C14G702Q</extcon:regCode>
           </extcon:registrant>
         </extdom:extInfo>
       </extdom:registrant>
     </extdom:infContactsData>
   </extension>
   <trID>
     <clTRID>ABC-12345</clTRID>
     <svTRID>fc205304-74dc-4dbe-89ff-411f12adca0a</svTRID>
   </trID>
  </response>
</epp>
```

Example 2
Response to an Info Domain request, relating to the domain name esempio.it, submitted by the Registrar with extension infContacts op="tech". In this case the server, in addition to the information relating to the domain name, also returns the data associated with the technical contacts referenced in it:

```
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:infData>
        <domain:name>esempio.it</domain:name>
        <domain:roid>ITNIC-162761</domain:roid>
        <domain:status lang="en" s="ok"/>
        <domain:registrant>MR0001</domain:registrant>
        <domain:contact type="admin">MR0001</domain:contact>
        <domain:contact type="tech">TECH001</domain:contact>
        <domain:contact type="tech">TECH002</domain:contact>
```

```
    <domain:ns>
      <domain:hostAttr>
        <domain:hostName>ns1.esempio.it</domain:hostName>
       <domain:hostAddr ip="v4">193.205.245.6</domain:hostAddr>
      </domain:hostAttr>
      <domain:hostAttr>
        <domain:hostName>ns2.esempio.it</domain:hostName>
       <domain:hostAddr ip="v4">193.205.245.7</domain:hostAddr>
      </domain:hostAttr>
    </domain:ns>
    <domain:host>ns1.esempio.it</domain:host>
    <domain:host>ns2.esempio.it</domain:host>
    <domain:clID>DEMO-REG</domain:clID>
    <domain:crID>DEMO-REG</domain:crID>
   <domain:crDate>2013-01-24T16:41:53.000+01:00</domain:crDate>
   <domain:exDate>2014-01-24T16:41:53.000+01:00</domain:exDate>
    <domain:authInfo>
      <domain:pw>22fooBAR</domain:pw>
    </domain:authInfo>
  </domain:infData>
</resData>
<extension>
  <extdom:infContactsData>
    <extdom:contact type="tech">
      <extdom:infContact>
        <contact:id>TECH001</contact:id>
        <contact:roid>ITNIC-326980</contact:roid>
        <contact:status lang="en" s="ok"/>
        <contact:status lang="en" s="linked"/>
        <contact:postalInfo type="loc">
          <contact:name>Mirco Bartolini</contact:name>
          <contact:org>Demo Registrar Srl</contact:org>
          <contact:addr>
            <contact:street>via 4 Novembre, 12</contact:street>
            <contact:city>Barga</contact:city>
            <contact:sp>LU</contact:sp>
            <contact:pc>55052</contact:pc>
            <contact:cc>IT</contact:cc>
          </contact:addr>
        </contact:postalInfo>
        <contact:voice x="">+39.0583123456</contact:voice>
        <contact:fax x="">+39.058375124</contact:fax>
        <contact:email>mirco.bartolini@demoreg.it</contact:email>
        <contact:clID>DEMO-REG</contact:clID>
        <contact:crID>DEMO-REG</contact:crID>
      <contact:crDate>2013-01-24T16:41:53.000+01:00</contact:crDate>
      </extdom:infContact>
      <extdom:extInfo>
       <extcon:consentForPublishing>true</extcon:consentForPublishing>
      </extdom:extInfo>
    </extdom:contact>
    <extdom:contact type="tech">
      <extdom:infContact>
        <contact:id>TECH002</contact:id>
        <contact:roid>ITNIC-326982</contact:roid>
        <contact:status lang="en" s="ok"/>
        <contact:status lang="en" s="linked"/>
        <contact:postalInfo type="loc">
          <contact:name>Andrea Bianchi</contact:name>
          <contact:org>Demo Registrar Srl</contact:org>
```

```
              <contact:addr>
                <contact:street>via 4 Novembre, 12</contact:street>
                <contact:city>Barga</contact:city>
                <contact:sp>LU</contact:sp>
                <contact:pc>55052</contact:pc>
                <contact:cc>IT</contact:cc>
              </contact:addr>
            </contact:postalInfo>
            <contact:voice x="">+39.0583123458</contact:voice>
            <contact:fax x="">+39.058375124</contact:fax>
            <contact:email>andrea.bianchi@demoreg.it</contact:email>
            <contact:clID>DEMO-REG</contact:clID>
            <contact:crID>DEMO-REG</contact:crID>
           <contact:crDate>2013-01-24T16:41:53.000+01:00</contact:crDate>
           </extdom:infContact>
           <extdom:extInfo>
          <extcon:consentForPublishing>true</extcon:consentForPublishing>
           </extdom:extInfo>
         </extdom:contact>
       </extdom:infContactsData>
     </extension>
     <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>c33f38aa-48ce-43ad-a86d-775b3d239b6c</svTRID>
     </trID>
   </response>
</epp>
```

Example 3
Response to an Info Domain request, relating to the domain name esempio.it, submitted by the Registrar with the extension infContacts op="all". In this case the server, in addition to the information relating to the domain name, also returns the data associated with all the contacts referenced in it (registrant, admin e tech):

```
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:infData>
        <domain:name>esempio.it</domain:name>
        <domain:roid>ITNIC-162761</domain:roid>
        <domain:status lang="en" s="ok"/>
        <domain:registrant>MR0001</domain:registrant>
        <domain:contact type="admin">MR0001</domain:contact>
        <domain:contact type="tech">TECH001</domain:contact>
        <domain:contact type="tech">TECH002</domain:contact>
        <domain:ns>
          <domain:hostAttr>
            <domain:hostName>ns1.esempio.it</domain:hostName>
           <domain:hostAddr ip="v4">193.205.245.6</domain:hostAddr>
          </domain:hostAttr>
```

```
      <domain:hostAttr>
        <domain:hostName>ns2.esempio.it</domain:hostName>
       <domain:hostAddr ip="v4">193.205.245.7</domain:hostAddr>
      </domain:hostAttr>
    </domain:ns>
    <domain:host>ns1.esempio.it</domain:host>
    <domain:host>ns2.esempio.it</domain:host>
    <domain:clID>DEMO-REG</domain:clID>
    <domain:crID>DEMO-REG</domain:crID>
   <domain:crDate>2013-01-24T16:41:53.000+01:00</domain:crDate>
   <domain:exDate>2014-01-24T16:41:53.000+01:00</domain:exDate>
    <domain:authInfo>
      <domain:pw>22fooBAR</domain:pw>
    </domain:authInfo>
  </domain:infData>
</resData>
<extension>
  <extdom:infContactsData>
    <extdom:registrant>
      <extdom:infContact>
        <contact:id>MR0001</contact:id>
        <contact:roid>ITNIC-326982</contact:roid>
        <contact:status lang="en" s="ok"/>
        <contact:status lang="en" s="linked"/>
        <contact:postalInfo type="loc">
          <contact:name>Mario Rossi</contact:name>
          <contact:org>Mario Rossi</contact:org>
          <contact:addr>
            <contact:street>Via Moruzzi, 1</contact:street>
            <contact:city>Pisa</contact:city>
            <contact:sp>PI</contact:sp>
            <contact:pc>56100</contact:pc>
            <contact:cc>IT</contact:cc>
          </contact:addr>
        </contact:postalInfo>
        <contact:voice x="">+39.050315111</contact:voice>
        <contact:fax x="">+39.050315111</contact:fax>
        <contact:email>mario.rossi@esempio.it</contact:email>
        <contact:clID>DEMO-REG</contact:clID>
        <contact:crID>DEMO-REG</contact:crID>
      <contact:crDate>2013-01-24T16:41:53.000+01:00</contact:crDate>
      </extdom:infContact>
      <extdom:extInfo>
       <extcon:consentForPublishing>true</extcon:consentForPublishing>
        <extcon:registrant>
          <extcon:nationalityCode>IT</extcon:nationalityCode>
          <extcon:entityType>1</extcon:entityType>
          <extcon:regCode>RSSMRA64C14G702Q</extcon:regCode>
        </extcon:registrant>
      </extdom:extInfo>
    </extdom:registrant>
    <extdom:contact type="admin">
      <extdom:infContact>
        <contact:id>MR0001</contact:id>
        <contact:roid>ITNIC-326982</contact:roid>
        <contact:status lang="en" s="ok"/>
        <contact:status lang="en" s="linked"/>
        <contact:postalInfo type="loc">
          <contact:name>Mario Rossi</contact:name>
          <contact:org>Mario Rossi</contact:org>
```

```
      <contact:addr>
        <contact:street>Via Moruzzi, 1</contact:street>
        <contact:city>Pisa</contact:city>
        <contact:sp>PI</contact:sp>
        <contact:pc>56100</contact:pc>
        <contact:cc>IT</contact:cc>
      </contact:addr>
    </contact:postalInfo>
    <contact:voice x="">+39.050315111</contact:voice>
    <contact:fax x="">+39.050315111</contact:fax>
    <contact:email>mario.rossi@esempio.it</contact:email>
    <contact:clID>DEMO-REG</contact:clID>
    <contact:crID>DEMO-REG</contact:crID>
  <contact:crDate>2013-01-24T16:41:53.000+01:00</contact:crDate>
  </extdom:infContact>
  <extdom:extInfo>
 <extcon:consentForPublishing>true</extcon:consentForPublishing>
    <extcon:registrant>
      <extcon:nationalityCode>IT</extcon:nationalityCode>
      <extcon:entityType>1</extcon:entityType>
      <extcon:regCode>RSSMRA64C14G702Q</extcon:regCode>
    </extcon:registrant>
  </extdom:extInfo>
</extdom:contact>
<extdom:contact type="tech">
  <extdom:infContact>
    <contact:id>TECH001</contact:id>
    <contact:roid>ITNIC-326980</contact:roid>
    <contact:status lang="en" s="ok"/>
    <contact:status lang="en" s="linked"/>
    <contact:postalInfo type="loc">
      <contact:name>Mirco Bartolini</contact:name>
      <contact:org>Demo Registrar Srl</contact:org>
      <contact:addr>
        <contact:street>via 4 Novembre, 12</contact:street>
        <contact:city>Barga</contact:city>
        <contact:sp>LU</contact:sp>
        <contact:pc>55052</contact:pc>
        <contact:cc>IT</contact:cc>
      </contact:addr>
    </contact:postalInfo>
    <contact:voice x="">+39.0583123456</contact:voice>
    <contact:fax x="">+39.058375124</contact:fax>
    <contact:email>mirco.bartolini@demoreg.it</contact:email>
    <contact:clID>DEMO-REG</contact:clID>
    <contact:crID>DEMO-REG</contact:crID>
  <contact:crDate>2013-01-24T16:41:53.000+01:00</contact:crDate>
  </extdom:infContact>
  <extdom:extInfo>
 <extcon:consentForPublishing>true</extcon:consentForPublishing>
  </extdom:extInfo>
</extdom:contact>
<extdom:contact type="tech">
  <extdom:infContact>
    <contact:id>TECH002</contact:id>
    <contact:roid>ITNIC-326982</contact:roid>
    <contact:status lang="en" s="ok"/>
    <contact:status lang="en" s="linked"/>
    <contact:postalInfo type="loc">
      <contact:name>Andrea Bianchi</contact:name>
```

```
            <contact:org>Demo Registrar Srl</contact:org>
            <contact:addr>
              <contact:street>via 4 Novembre, 12</contact:street>
              <contact:city>Barga</contact:city>
              <contact:sp>LU</contact:sp>
              <contact:pc>55052</contact:pc>
              <contact:cc>IT</contact:cc>
            </contact:addr>
          </contact:postalInfo>
          <contact:voice x="">+39.0583123458</contact:voice>
          <contact:fax x="">+39.058375124</contact:fax>
          <contact:email>andrea.bianchi@demoreg.it</contact:email>
          <contact:clID>DEMO-REG</contact:clID>
          <contact:crID>DEMO-REG</contact:crID>
        <contact:crDate>2013-01-24T16:41:53.000+01:00</contact:crDate>
        </extdom:infContact>
        <extdom:extInfo>
        <extcon:consentForPublishing>true</extcon:consentForPublishing>
        </extdom:extInfo>
      </extdom:contact>
    </extdom:infContactsData>
  </extension>
  <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>02cd9dbe-82d1-475f-ab66-4b49c5223a1c</svTRID>
  </trID>
  </response>
</epp>
```

4.2.3   Domain Transfer Query

The Domain Transfer Query command enables the client to request information on a single domain name for which a request to change the Registrar is under way or has been completed. The domain object associated with the domain name specified in the request must be present in the Registry Database and the client that sends the request must be the one that currently manages the domain name or the new Registrar who must take over and that is in possession of the AuthInfo. Otherwise the server sends a response error. In its response, the server reports the information of the object relative to the transfer, including any extensions that have been automatically assigned by the system.

For as long as the domain name is in pendingTransfer, the command can be submitted without AuthInfo both by the Registrar requesting the transfer (i.e. the new Registrar) and by the one currently associated with the domain name (i.e. the previous Registrar). Once the transfer has been completed, successfully or unsuccessfully, only the Registrar who holds the domain name can submit the Transfer Query command without the AuthInfo.

For a change of the Registrar with the simultaneous change in the Registrant which is still in progress, the server's response will include the identity of the new Registrant and the new AuthInfo. For the sake of privacy, this information is provided only if the request for Transfer Query came from the same Registrar as sent the request for transfer.

The information that the server will include in the response is shown in the following table:

Field	Description	XML Tag	XML Tag Attribute	Cardinality	Notes
Domain name	Unique ID of the domain name in the Registry's Database	domain:name			

Transfer status	Transfer substatus to describe the transfer situation	domain:trStatus			Assigned automatically by the system. Possible values: pending clientApproved clientRejected clientCancelled serverApproved
Client ID of the request	ID of Registrar that submitted the transfer request	domain:reID			Assigned automatically by the system
Request date	Date when the transfer request was submitted	domain:reDate			Assigned automatically by the system
Request acceptance Client ID	ID of Registrar to whom the possible transfer validation is requested	domain:acID			Assigned automatically by the system
Request acceptance date	Transfer must be accepted before this date	domain:acDate			Assigned automatically by the system. Calculated starting from the request date, adding the maximum period in which the domain can stay in the pendingTransfer
New Registrant data		extdom:transferTrade			Extension containing information to change the Registrant with the simultaneous change in Registrar
New Registrant	New Registrant identifier	extdom:newRegistrant			
New domain name AuthInfo	Identifies the new authorization password for the domain name specific operation request	extdom:newAuthInfo			

4.2.3.1 Example of Domain Transfer Query request

```xml
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <transfer op="query">
      <domain:transfer
       xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>example.it</domain:name>
```

```
          <domain:authInfo>
            <domain:pw>22fooBAR</domain:pw>
          </domain:authInfo>
        </domain:transfer>
      </transfer>
      <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

4.2.3.2 Examples of responses to a Domain Transfer Query request

Example 1

Response to a Domain Transfer Query request on a domain name that is not in pendingTransfer:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="2301">
        <msg lang="en">Object not pending transfer</msg>
      <value>
       <extepp:wrongValue>
         <extepp:element>name</extepp:element>
        <extepp:namespace>urn:ietf:params:xml:ns:domain-
1.0</extepp:namespace>
        <extepp:value>example.it</extepp:value>
       </extepp:wrongValue>
      </value>
  <extValue>
    <value>
      <extepp:reasonCode>9054</extepp:reasonCode>
    </value>
    <reason lang="en">Domain transfer not pending</reason>
   </extValue>
  </result>
  <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>10e0d6f8-5987-4784-8f76-baf8fb479d0f</svTRID>
  </trID>
 </response>
</epp>
```

Example 2

Response to a Domain Transfer Query request submitted by an unauthorized Registrar: the Registrar that is making the request is not the one that currently operates the domain name nor the one that made the request to change the Registrar:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
```

```
    xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
    xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
    xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <response>
      <result code="2201">
        <msg lang="en">Authorization error</msg>
        <value>
          <extepp:wrongValue>
            <extepp:element>name</extepp:element>
            <extepp:namespace>urn:ietf:params:xml:ns:domain-
1.0</extepp:namespace>
            <extepp:value>example.it</extepp:value>
          </extepp:wrongValue>
        </value>
        <extValue>
          <value>
            <extepp:reasonCode>9051</extepp:reasonCode>
          </value>
          <reason lang="en">Lack of permissions to view status of domain
transfer request</reason>
        </extValue>
      </result>
      <trID>
        <clTRID>ABC-12345</clTRID>
        <svTRID>0c98654e-b138-4fc7-ac03-fa61f40edf57</svTRID>
      </trID>
    </response>
</epp>
```

Example 3
Response to a Domain Transfer Query request on a domain name that is in pendingTransfer:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:trnData>
        <domain:name>example.it</domain:name>
        <domain:trStatus>pending</domain:trStatus>
        <domain:reID>NEW-REGISTRAR</domain:reID>
        <domain:reDate>2013-02-25T07:40:00+01:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2013-02-25T23:59:59+01:00</domain:acDate>
      </domain:trnData>
    </resData>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>6017a420-0c4c-4c5d-afd8-a9b5b1c73400</svTRID>
    </trID>
  </response>
```

```
</epp>
```

Example 4

Response to a Domain Transfer Query request on a domain name for which the last request for change of Registrar has been approved:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
       <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:trnData>
        <domain:name>example.it</domain:name>
        <domain:trStatus>clientApproved</domain:trStatus>
        <domain:reID>NEW-REGISTRAR</domain:reID>
        <domain:reDate>2013-02-25T07:54:21+01:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2013-02-25T08:54:49+01:00</domain:acDate>
      </domain:trnData>
    </resData>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>fbffe593-fe79-4794-80c8-63724f211f8b</svTRID>
    </trID>
  </response>
</epp>
```

Example 5

Response to a Domain Transfer Query requested by the new Registrar that has submitted the Transfer-Trade Domain command for the change of the Registrar with the simultaneous change of the registrant of a domain name (example.it).
In this case the domain name is in pendingTransfer.
The response to the Domain Transfer Query command contains "extdom:trade" because the Registrar that made a Domain Transfer Query request is the same as the one submitted the Domain Transfer Request with "extdom:trade":

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
       <msg lang="en">Command completed successfully</msg>
    </result>
```

```
    <resData>
      <domain:trnData>
        <domain:name>example.it</domain:name>
        <domain:trStatus>pending</domain:trStatus>
        <domain:reID>NEW-REGISTRAR</domain:reID>
        <domain:reDate>2013-07-29T15:02:34+02:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2013-07-29T23:59:59+02:00</domain:acDate>
      </domain:trnData>
    </resData>
    <extension>
      <extdom:trade>
        <extdom:transferTrade>
          <extdom:newRegistrant>MM2-001</extdom:newRegistrant>
          <extdom:newAuthInfo>
            <extdom:pw>NEW2fooBAR</extdom:pw>
          </extdom:newAuthInfo>
        </extdom:transferTrade>
      </extdom:trade>
    </extension>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>c6959039-2eee-4aba-9162-a51153af2ecc</svTRID>
    </trID>
  </response>
</epp>
```

Example 6

Response to a Domain Transfer Query submitted by the old Registrar on a domain name maintained by this old Registrar (example.it) that is subject to a Transfer-Trade Domain request for the change of the Registrar with the simultaneous change of the Registrant.

In this case the domain name is in pendingTransfer.

The response to the command Domain Transfer Query does not contain "extdom:trade" because the Registrar that made a Domain Transfer Query request is the same one that manages the domain name:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:trnData>
        <domain:name>example.it</domain:name>
        <domain:trStatus>pending</domain:trStatus>
        <domain:reID>NEW-REGISTRAR</domain:reID>
        <domain:reDate>2013-07-29T15:02:34+02:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2013-07-29T23:59:59+02:00</domain:acDate>
      </domain:trnData>
    </resData>
```

```
  <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>3a82464f-9d0a-4078-9c38-38db12501f0e</svTRID>
  </trID>
 </response>
</epp>
```

4.3   Polling

4.3.1   Example of a Poll Req request

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
   <command>
     <poll op="req"/>
      <clTRID>ABC-12345</clTRID>
     </command>
 </epp>
```

4.3.2   Examples of responses to a Poll Req request

Example 1
Response to a Req Poll completed successfully. The message informs the client in relation to the imminent expiry of the password.
The response contains extepp:passwordReminder which shows the expiry date of the password.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1301">
     <msg lang="en">Command completed successfully; ack to dequeue</msg>
    </result>
    <msgQ id="26" count="1">
      <qDate>2013-07-22T09:07:43+02:00</qDate>
      <msg lang="en">Password will expire soon</msg>
    </msgQ>
    <extension>
      <extepp:passwdReminder>
        <extepp:exDate>2013-07-30T12:28:42+02:00</extepp:exDate>
      </extepp:passwdReminder>
    </extension>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>8bc32a50-89cb-4bb8-a216-a1dc75f18204</svTRID>
    </trID>
  </response>
</epp>
```

Example 2
Response to a Poll Req completed successfully. The message informs the client that in the Login

request some obsolete namespaces were mentioned.
The answer contains the extepp:wrongNamespaceReminder extension which shows the wrong namespaces and the correct ones.

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1301">
       <msg lang="en">Command completed successfully; ack to
dequeue</msg>
    </result>
    <msgQ id="26" count="1">
      <qDate>2012-04-12T10:00:42.000+02:00</qDate>
      <msg lang="en">Wrong namespace in Login Request</msg>
    </msgQ>
    <extension>
     <extepp:wrongNamespaceReminder>
      <extepp:wrongNamespaceInfo>
        <extepp:wrongNamespace>http://www.nic.it/ITNIC-EPP/extepp-
1.0</extepp:wrongNamespace>
        <extepp:rightNamespace>http://www.nic.it/ITNIC-EPP/extepp-
2.0</extepp:rightNamespace>
       </extepp:wrongNamespaceInfo>
       <extepp:wrongNamespaceInfo>
        <extepp:wrongNamespace>http://www.nic.it/ITNIC-EPP/extdom-
1.0</extepp:wrongNamespace>
        <extepp:rightNamespace>http://www.nic.it/ITNIC-EPP/extdom-
2.0</extepp:rightNamespace>
       </extepp:wrongNamespaceInfo>
     </extepp:wrongNamespaceReminder></extension>
   <trID>
     <clTRID>ABC-12345</clTRID>
     <svTRID>358813aa-c12d-4871-8a8b-0410f7dba4b0</svTRID>
   </trID>
  </response>
</epp>
```

Example 3

Response to a Poll Req completed successfully. The message informs the client that the nameservers associated with the domain name are not configured correctly.

The response contains extdom:dnsErrorMsgData which contains information on the verification of the correctness of the DNS configuration of the domain name operated by the synchronous server of the Registry:

- **extdom:domain:** name of the domain undergoing check

- **extdom:status:** final check outcome

- **extdom:validationId:** univocal identification code of the check request internally carried out by the synchronous server of the Registry

- **extdom:validationDate:** date of the last check carried out

- extdom:nameservers:

- **extdom:nameserver:** (list of items)
  - **name:** name of the nameserver (attribute)
  - **extdom:address:** possible IP address (list of items)
    - **type:** one of the following values (attribute):
      - *IPV4*
      - *IPv6*
- extdom:tests:
  - **extdom:test:** (list of items)
    - **name:** name of the test (attribute)
    - **status:** final outcome of the specific test (attribute)
    - **skipped:** test non executed (attribute)
    - **extdom:nameserver:** (list of items)
      - **name:** name of the nameserver undergoing a test (attribute)
      - **status:** outcome of the specific test on the nameserver (attribute)
      - **extdom:detail:** (list of items)
        - **name:** host name in the query for the CNAMEHostTest (attribute)
        - **status:** outcome of the query (attribute)
        - **queryId:** query identifier (attribute)
- extdom:queries:
  - **extdom:query:** (list of items)
    - **id:** query identifier (attribute)
    - **extdom:queryFor:** object of the query
    - **extdom:type:** one of the following values:
      - *ANY*
      - *SOA*
      - *NS*
      - *A*
      - *MX*
      - *AAAA*
      - *CNAME*
      - *PTR*
      - *TXT*
    - **extdom:destination:** query receiver
    - **extdom:result:** outcome of the query

In each element the *status* attribute can take the following values: FAILED, SUCCEEDED, WARNING

```
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:host="urn:ietf:params:xml:ns:host-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0">
  <response>
    <result code="1301">
      <msg lang="en">Command completed successfully; ack to dequeue</msg>
    </result>
    <msgQ id="4" count="36">
```

```
      <qDate>2012-04-04T18:25:14.000+02:00</qDate>
      <msg lang="en">DNS check ended unsuccessfully</msg>
  </msgQ>
  <extension>
    <extdom:dnsErrorMsgData version="2.0">
      <extdom:domain>esempio.it</extdom:domain>
      <extdom:status>FAILED</extdom:status>
      <extdom:validationId>e7edc45c-7e38-4d98-bf40-
96c9f604dec8</extdom:validationId>
      <extdom:validationDate>2012-04-
04T18:20:13.993+02:00</extdom:validationDate>
      <extdom:nameservers>
        <extdom:nameserver name="ns1.esempio.it.">
          <extdom:address type="IPv4">192.12.192.23</extdom:address>
        </extdom:nameserver>
        <extdom:nameserver name="ns2.esempio.it.">
          <extdom:address type="IPv4">192.12.192.24</extdom:address>
        </extdom:nameserver>
      </extdom:nameservers>
      <extdom:tests>
        <extdom:test status="SUCCEEDED" name="NameserversResolvableTest">
          <extdom:nameserver status="SUCCEEDED" name="ns1.esempio.it."/>
          <extdom:nameserver status="SUCCEEDED" name="ns2.esempio.it."/>
        </extdom:test>
        <extdom:test status="FAILED" name="NameserversAnswerTest">
          <extdom:nameserver status="FAILED" name="ns2.esempio.it.">
            <extdom:detail queryId="2">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
          </extdom:nameserver>
          <extdom:nameserver status="FAILED" name="ns1.esempio.it.">
            <extdom:detail queryId="1">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
          </extdom:nameserver>
        </extdom:test>
        <extdom:test status="FAILED" name="NameserverReturnCodeTest">
          <extdom:nameserver status="FAILED" name="ns2.esempio.it.">
            <extdom:detail queryId="2">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
          </extdom:nameserver>
          <extdom:nameserver status="FAILED" name="ns1.esempio.it.">
            <extdom:detail queryId="1">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
          </extdom:nameserver>
        </extdom:test>
        <extdom:test status="FAILED" name="AATest">
          <extdom:nameserver status="FAILED" name="ns2.esempio.it.">
            <extdom:detail queryId="2">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
          </extdom:nameserver>
          <extdom:nameserver status="FAILED" name="ns1.esempio.it.">
            <extdom:detail queryId="1">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
          </extdom:nameserver>
        </extdom:test>
        <extdom:test status="FAILED" name="NSCompareTest">
          <extdom:nameserver status="FAILED" name="ns2.esempio.it.">
            <extdom:detail queryId="2">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
          </extdom:nameserver>
          <extdom:nameserver status="FAILED" name="ns1.esempio.it.">
```

```
        <extdom:detail queryId="1">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
        </extdom:nameserver>
      </extdom:test>
      <extdom:test status="FAILED" name="NSCountTest">
        <extdom:nameserver status="FAILED" name="ns2.esempio.it.">
          <extdom:detail queryId="2">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
        </extdom:nameserver>
        <extdom:nameserver status="FAILED" name="ns1.esempio.it.">
          <extdom:detail queryId="1">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
        </extdom:nameserver>
      </extdom:test>
      <extdom:test status="WARNING" name="CNAMEHostTest"/>
      <extdom:test status="FAILED" name="IPCompareTest">
        <extdom:nameserver status="FAILED" name="ns1.esempio.it.">
          <extdom:detail>Unresolveable ns1.esempio.it.</extdom:detail>
        </extdom:nameserver>
        <extdom:nameserver status="FAILED" name="ns2.esempio.it.">
          <extdom:detail>Unresolveable ns2.esempio.it.</extdom:detail>
        </extdom:nameserver>
      </extdom:test>
      <extdom:test status="FAILED" name="MXCompareTest">
        <extdom:nameserver status="FAILED" name="ns2.esempio.it.">
          <extdom:detail queryId="2">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
        </extdom:nameserver>
        <extdom:nameserver status="FAILED" name="ns1.esempio.it.">
          <extdom:detail queryId="1">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
        </extdom:nameserver>
      </extdom:test>
      <extdom:test status="WARNING" name="MXRecordIsPresentTest">
        <extdom:nameserver status="WARNING" name="ns2.esempio.it.">
          <extdom:detail queryId="2">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
        </extdom:nameserver>
        <extdom:nameserver status="WARNING" name="ns1.esempio.it.">
          <extdom:detail queryId="1">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
        </extdom:nameserver>
      </extdom:test>
      <extdom:test status="WARNING" name="SOAMasterCompareTest">
        <extdom:nameserver status="WARNING" name="ns2.esempio.it.">
          <extdom:detail queryId="2">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
        </extdom:nameserver>
        <extdom:nameserver status="WARNING" name="ns1.esempio.it.">
          <extdom:detail queryId="1">Nameserver test skipped for error in
query: java.net.SocketTimeoutException</extdom:detail>
        </extdom:nameserver>
      </extdom:test>
      <extdom:test skipped="true" name="IPSoaTest"/>
    </extdom:tests>
    <extdom:queries>
      <extdom:query id="1">
        <extdom:queryFor>esempio.it.</extdom:queryFor>
        <extdom:type>ANY</extdom:type>
```

```
<extdom:destination>ns1.esempio.it./[IPAddress(address=/192.12.192.23,
family=1)]</extdom:destination>
        <extdom:result>java.net.SocketTimeoutException</extdom:result>
      </extdom:query>
      <extdom:query id="2">
        <extdom:queryFor>esempio.it.</extdom:queryFor>
        <extdom:type>ANY</extdom:type>

<extdom:destination>ns2.esempio.it./[IPAddress(address=/192.12.192.24,
family=1)]</extdom:destination>
        <extdom:result>java.net.SocketTimeoutException</extdom:result>
      </extdom:query>
      <extdom:query id="3">
        <extdom:queryFor>ns1.esempio.it.</extdom:queryFor>
        <extdom:type>ANY</extdom:type>

<extdom:destination>ns1.esempio.it./[IPAddress(address=/192.12.192.23,
family=1)], ns2.esempio.it./[IPAddress(address=/192.12.192.24,
family=1)]</extdom:destination>
        <extdom:result>java.net.SocketTimeoutException</extdom:result>
      </extdom:query>
      <extdom:query id="4">
        <extdom:queryFor>ns2.esempio.it.</extdom:queryFor>
        <extdom:type>ANY</extdom:type>

<extdom:destination>ns1.esempio.it./[IPAddress(address=/192.12.192.23,
family=1)], ns2.esempio.it./[IPAddress(address=/192.12.192.24,
family=1)]</extdom:destination>
        <extdom:result>java.net.SocketTimeoutException</extdom:result>
      </extdom:query>
    </extdom:queries>
  </extdom:dnsErrorMsgData>
</extension>
<trID>
  <clTRID>RTRT-00037</clTRID>
  <svTRID>4f8a0382-95e3-402e-a120-83aee6a41038</svTRID>
</trID>
</response>
</epp>
```

Example 4

Response to a Poll Req completed successfully. The server notifies the client of an event that took place on a domain name. In this case, the message informs the Registrar that the domain name, which he managed, has been deleted. The response contains **extdom:simpleMsgData**, which only shows the domain name in question.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1301">
     <msg lang="en">Command completed successfully; ack to dequeue</msg>
     </result>
```

```
    <msgQ id="24" count="1">
      <qDate>2013-07-21T12:44:37+02:00</qDate>
      <msg lang="en">Domain has been deleted</msg>
    </msgQ>
     <extension>
       <extdom:simpleMsgData>
          <extdom:name>esempio.it</extdom:name>
       </extdom: simpleMsgData>
     </extension>
     <trID>
       <clTRID>ABC-12345</clTRID>
       <svTRID>2b421937-c235-4a92-9209-613deb593ac2</svTRID>
     </trID>
    </response>
</epp>
```

Example 5

Response to a Poll Req completed successfully. The server sends the switch status of a domain name.

The message is sent following a report from a client following an event. This example considers a request for deletion and subsequent placing of the domain name in pendingDelete/*redemptionPeriod*.

The response contains extdom:chgStatusMsgData, which contains the following information:

- **extdom:name**: The name of the domain to which the message refers and which underwent a switch status;

- **extdom:targetStatus**: the status of arrival of the domain name contains the statuses that may belong to the standard ones described in XML Schema domain-1.0.xsd (tag domain:status) to the extension of the protocol for the grace period and are described in rgp-1.0.xsd (tag rgp:rgpStatus) or the extension extdom-2.0.xsd (tag extdom:ownStatus).

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1301">
     <msg lang="en">Command completed successfully; ack to dequeue</msg>
    </result>
    <msgQ id="84" count="1">
      <qDate>2013-08-04T18:57:45+02:00</qDate>
      <msg lang="en">redemptionPeriod is started</msg>
    </msgQ>
    <extension>
      <extdom:chgStatusMsgData>
        <extdom:name>esempio.it</extdom:name>
        <extdom:targetStatus>
          <domain:status lang="en" s="pendingDelete"/>
          <rgp:rgpStatus lang="en" s="redemptionPeriod"/>
        </extdom:targetStatus>
      </extdom:chgStatusMsgData>
    </extension>
    <trID>
```

```
      <clTRID>ABC-12345</clTRID>
      <svTRID>fbf2aa9a-f195-4fee-a23b-8e4af6a1d7e1</svTRID>
    </trID>
   </response>
</epp>
```

Example 6

Response to a Poll Req completed successfully. The server notifies the interruption of the proxy.
The message is sent following the deletion of a domain name registered with nameservers
subordinate to it and referenced in the registration of other domain names.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1301">
     <msg lang="en">Command completed successfully; ack to dequeue</msg>
    </result>
    <msgQ id="24" count="1">
      <qDate>2013-07-21T12:50:57+02:00</qDate>
      <msg lang="en">Lost delegation</msg>
    </msgQ>
    <extension>
      <extdom:dlgMsgData>
        <extdom:name>dominio.it</extdom:name>
       <extdom:ns>ns1.esempio.it</extdom:ns>
      </extdom:dlgMsgData>
    </extension>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>aa5b4315-6d24-4c10-8db9-c38732ec8140</svTRID>
    </trID>
  </response>
</epp>
```

Example 7

Response to a Poll Req completed successfully. The server notifies the current Registrar of the
domain name of the request for change of Registrar received from the new Registrar.
In this case the change of Registrar was requested by the "NEW-REGISTRAR" using Domain
Transfer "op=request". The message is inserted in the polling queue of the Registrar "DEMO-
REGISTRAR" that manages the domain name.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
```

```
    <result code="1301">
     <msg lang="en">Command completed successfully; ack to dequeue</msg>
    </result>
    <msgQ id="33" count="1">
      <qDate>2013-07-29T10:19:16+02:00</qDate>
      <msg lang="en">Domain transfer has been requested: pendingTransfer
is started</msg>
    </msgQ>
    <resData>
      <domain:trnData>
        <domain:name>esempio.it</domain:name>
        <domain:trStatus>pending</domain:trStatus>
        <domain:reID>NEW-REGISTRAR</domain:reID>
        <domain:reDate>2013-07-29T10:19:16+02:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2013-07-29T23:59:59+02:00</domain:acDate>
      </domain:trnData>
    </resData>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>f8c470d4-e23e-412d-9073-5f1ec43bf088</svTRID>
    </trID>
  </response>
</epp>
```

Example 8

Response to a Poll Req completed successfully. The server notifies the current Registrar of the domain name that the request for change of Registrar has been annulled by the new Registrar.

The request is submitted by the Registrar "NEW-REGISTRAR" using Domain Transfer "op=cancel". The message is inserted in the polling queue of the Registrar "DEMO-REGISTRAR" that manages the domain name.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1301">
     <msg lang="en">Command completed successfully; ack to dequeue</msg>
    </result>
    <msgQ id="34" count="1">
      <qDate>2013-07-29T10:23:34+02:00</qDate>
      <msg lang="en">Domain transfer has been cancelled</msg>
    </msgQ>
    <resData>
      <domain:trnData>
        <domain:name>esempio.it</domain:name>
        <domain:trStatus>clientCancelled</domain:trStatus>
        <domain:reID>NEW-REGISTRAR</domain:reID>
        <domain:reDate>2013-07-29T10:19:16+02:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2013-07-29T10:23:34+02:00</domain:acDate>
      </domain:trnData>
    </resData>
```

```
  <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>f4ac9065-1514-461f-b47e-ce49d76f0a1c</svTRID>
  </trID>
  </response>
</epp>
```

Example 9

Response to a Poll Req completed successfully. The server notifies the new Registrar that the request for change of Registrar has been rejected by the current Registrar of the domain name.
The request is submitted by the Registrar "DEMO-REGISTRAR" using Domain Transfer "op=reject". The message is inserted in the polling queue of the Registrar "NEW-REGISTRAR" that previously made the request for change of Registrar.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1301">
     <msg lang="en">Command completed successfully; ack to dequeue</msg>
    </result>
    <msgQ id="36" count="1">
      <qDate>2013-07-29T10:31:23+02:00</qDate>
      <msg lang="en">Domain transfer has been rejected</msg>
    </msgQ>
    <resData>
      <domain:trnData>
        <domain:name>esempio.it</domain:name>
        <domain:trStatus>clientRejected</domain:trStatus>
        <domain:reID>NEW-REGISTRAR</domain:reID>
        <domain:reDate>2013-07-29T10:30:39+02:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2013-07-29T10:50:22+02:00</domain:acDate>
      </domain:trnData>
    </resData>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>22a4ebad-cbdc-484e-b2af-daabbef0e04e</svTRID>
    </trID>
  </response>
</epp>
```

Example 10

Response to a Poll Req completed successfully. The server notifies the new Registrar that the request for change of Registrar has been approved by the current Registrar of the domain name.
The request is submitted by the Registrar "DEMO-REGISTRAR" using Domain Transfer "op=approve". The message is inserted in the polling queue of the Registrar "NEW-REGISTRAR" and, with a different svTRID, in that of the old Registrar "DEMO-REGISTRAR".

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
```

```
xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
xmlns="urn:ietf:params:xml:ns:epp-1.0">
<response>
  <result code="1301">
   <msg lang="en">Command completed successfully; ack to dequeue</msg>
  </result>
  <msgQ id="36" count="1">
    <qDate>2013-07-29T10:31:23+02:00</qDate>
    <msg lang="en">Domain transfer has been executed</msg>
  </msgQ>
  <resData>
    <domain:trnData>
      <domain:name>esempio.it</domain:name>
      <domain:trStatus>clientApproved</domain:trStatus>
      <domain:reID>NEW-REGISTRAR</domain:reID>
      <domain:reDate>2013-07-29T10:30:39+02:00</domain:reDate>
      <domain:acID>DEMO-REGISTRAR</domain:acID>
      <domain:acDate>2013-07-29T10:31:22+02:00</domain:acDate>
    </domain:trnData>
  </resData>
  <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>0f5c62c1-244c-4fb7-9c46-ff96bd2dcd08</svTRID>
  </trID>
</response>
</epp>
```

Example 11
Response to a Poll Req completed successfully.
In this case the change of Registrar is made automatically by the server at the expiry of pendingTransfer. The message is inserted in the polling queue of the Registrar "NEW-REGISTRAR" and, with a different svTRID, in that of the old Registrar "DEMO-REGISTRAR".

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1301">
     <msg lang="en">Command completed successfully; ack to dequeue</msg>
    </result>
    <msgQ id="36" count="1">
      <qDate>2013-07-29T10:31:23+02:00</qDate>
      <msg lang="en">Domain transfer is expired: transfer has been
executed</msg>
    </msgQ>
    <resData>
      <domain:trnData>
        <domain:name>esempio.it</domain:name>
        <domain:trStatus>serverApproved</domain:trStatus>
```

```
      <domain:reID>NEW-REGISTRAR</domain:reID>
      <domain:reDate>2013-07-29T10:30:39+02:00</domain:reDate>
      <domain:acID>DEMO-REGISTRAR</domain:acID>
      <domain:acDate>2013-07-30T00:45:00+02:00</domain:acDate>
    </domain:trnData>
  </resData>
  <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>ad4ccc2c-33e2-40b8-93c9-1d4ff959a3e5</svTRID>
  </trID>
  </response>
</epp>
```

Example 12

Response to a Poll Req completed successfully. The server notifies the Registrar about a domain name registration which contains "*remapped*" characters (see Section 2.2.2):

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
 xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0">
  <response>
    <result code="1301">
     <msg lang="en">Command completed successfully; ack to dequeue</msg>
    </result>
    <msgQ id="32969079" count="54">
        <qDate>2012-03-27T14:07:04.000+01:00</qDate>
        <msg lang="en">Requested IDN domain contains remapped chars</msg>
    </msgQ>
    <extension>
      <extdom:remappedIdnData>
        <extdom:idnRequested>ὰιὰιὰιὰι.it</extdom:idnRequested>
        <extdom:idnCreated>ὰὰὰὰ.it</extdom:idnCreated>
      </extdom:remappedIdnData>
    </extension>
    <trID>
      <svTRID>25a61bec-0c95-4c8c-b389-6c10fz00ub74</svTRID>
    </trID>
  </response>
</epp>
```

The response includes the extension "**extdom:remappedIdnData**" that contains the IDN domain name requested in the Create Domain command ("**extdom:idnRequested**") and the domain name actually recorded as a result of transformation ("**extdom:idnCreated**").

4.3.3 Example of a Poll Ack request

Poll Ack for deleting the message with msgID="227" from the client's polling queue:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <poll op="ack" msgID="227"/>
```

```
      <clTRID>ABC-12346</clTRID>
   </command>
</epp>
```

4.3.4   Examples of responses to a Poll Ack request

Example 1
Response to successful Poll Ack:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
       <msg lang="en">Command completed successfully</msg>
    </result>
    <trID>
      <clTRID>ABC-12346</clTRID>
      <svTRID>a5c3bc6c-0b8e-469c-a208-ec0a37cc1b91</svTRID>
    </trID>
  </response>
</epp>
```

Example 2
Response to successful Poll Ack sent by client whose polling queue is empty.

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1300">
      <msg lang="en">Command completed successfully; no messages</msg>
    </result>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>3239ef1b-d3da-486c-a160-301c3efe256c</svTRID>
    </trID>
  </response>
</epp>
```

5   DNSSEC in the ccTLD .it

The DNS (Domain Name System) protocol defines the specifications to provide a domain name resolution service that has no form of authentication nor implements mechanisms to ensure data integrity. In order to overcome this limitation, the IETF has defined a protocol known as Domain Name System Security Extensions (DNSSEC). DNSSEC uses public/private keys for cryptography to ensure that the information is coming from an authoritative source, and has not been altered during its transport through the network.

DNSSEC enables:

- DNS servers to sign their own resource records (RRs) with a private key;

- DNS resolvers to verify the information through its public key.

The public keys are stored in the "parent" zone of the digitally signed zone.

To facilitate the verification of signatures, DNSSEC has established some new RRs:

- RRSIG: containing a cryptographic signature for a set of RRs of the same type (RRset);

- DNSKEY: containing a public key.

DNSSEC also introduces the Delegation Signer (DS) record to implement the "chain-of-trust" between a parent zone and a child zone. A zone manager generates a "digest" of the public key (DNSKEY record) associated with the digitally signed domain name and transmits it to the parent zone manager who associates the delegation of the domain name through a DS record.

5.1   Delegation Signer (DS) record

In general, the most commonly methods used to obtain the DS record to be associated with a domain name and create the "chain-of-trust" in a TLD zone are:

- the Registrar (or the person who manages the authoritative name server of the zone you wish to sign) generates and transmits it (via EPP, via Web portal, etc.) to the Registry that manages the TLD;

- the Registrar (or the person who manages the authoritative name server of the zone you wish to sign) generates and transmits (via EPP, via Web portal, etc.) to the Registry that manages the TLD the public key associated with the zone and consequently, the DS record generation is ascribed to the TLD Registry.

The ccTLD .it has implemented the first solution, that is: the Registrar shall transmit to the .it Registry the DS records associated with a domain name. Even if a domain name has the DNS service managed by someone other than the Registrar, the DS record transmission is still under the responsibility of the Registrar of the domain name, and must be made exclusively through the EPP protocol.

In practice, the Registrar must communicate to the .it Registry, via EPP, the following four fields, which compose the DS record associated with the domain name that has been signed:

- *keytag*: this value is automatically calculated when the DS record is generated and depends strictly on the information related to the public key;

- *algorithm*: the values supported by the .it Registry are the following:
    - **3** (DSA/SHA-1)
    - **5** (RSA/SHA-1)
    - **6** (DSA-NSEC3-SHA1)
    - **7** (RSASHA1-NSEC3-SHA1)

- o **8** (RSA/SHA-256)
- o **10** (RSA/SHA-512)
- o **12** (ECC-GOST)
- o **13** (ECDSAP256SHA256)
- o **14** (ECDSAP384SHA384)

- *digest type*: the values supported by the .it Registry are the following:
  - o **1** (SHA-1)
  - o **2** (SHA-256)
  - o **3 (**GOST R 34.11-94)
  - o **4 (**SHA-384)

- *digest*: is the hash generated from the public key according to the *algorithm* and *digest type.*

5.2   Registrars and DNSSEC

In the .it ccTLD, the adoption of DNSSEC protocol by Registrars is neither mandatory nor binding.

The Registrars interested in providing this service to their customers will have to carry out a "DNSSEC technical accreditation test" whose specifications are outlined in a dedicated document.

The Registrars which, on the contrary, do not wish to make use of this service, can continue to operate as at present.

A Registrar has the possibility to carry out the DNSSEC technical accreditation test, if and only if, it is an accredited Registrar in the .it ccTLD and in "active" status.

Registrars are therefore divided into two categories:

- "DNSSEC accredited";

- "non DNSSEC accredited".

The "DNSSEC accredited" Registrars are identified on the Registry website (www.nic.it) by a special logo.

The Whois service contains, in the "Registrar" section, the "DNSSEC:" field with "yes" or "no" values depending on whether the Registrar is "DNSSEC accredited" or not (see "Appendix M - The WHOIS service").

Similarly, the Whois service includes, for domain names, the "Signed:" field with "yes" or "no" values depending on whether the domain name has been signed or not (see "Appendix M - The WHOIS service").

In the .it ccTLD the transmission of DS records associated with digitally signed zones, for their publication in the .it zone file, is carried out by the "DNSSEC accredited" Registrars and this must take place exclusively with EPP protocol.

5.3   EPP and DNSSEC

Let us now see the implications of the introduction of DNSSEC on the requests that a "DNSSEC accredited" Registrar must send to the EPP server of .it Registry through its client.

The **secDNS-1.1** standard extension to the EPP[9] protocol describes two different ways to enable a Registrar to transmit to the Registry the information regarding the DS records:

1.   the first, referred to as "DS Data Interface" foresees the transmission via EPP of DS records information to the Registry. This transmission takes place concurrently with the registration of a "signed" domain name (through the EPP Domain Create operation) or a subsequent modification of the DS records associated with it (addition, removal or replacement by an

---

[9] RFC 5910 - Domain Name System (DNS) Security Extensions Mapping for the Extensible Provisioning Protocol (EPP)

EPP Domain Update operation). The EPP server of the Registry will report such information in the response to the EPP Domain Info request;

2.   the second, referred to as "Key Data Interface", is quite similar to the first with the difference that the Registrar, instead of providing information about the DS records, must provide data on the public key associated with the "signed" domain name (flags, protocol, alg, pubkey).

Optionally, the protocol provides that the "DS Data Interface" can be provided, along with the DS record information, including those relating to the "Key Data Interface". This is to facilitate an eventual consistency check by the Registry, including the public key and the DS records associated with the domain name.
It is mandatory that the EPP server supports a single mode of transmission of information within a single request or response.

The .it ccTLD has chosen the "DS Data Interface" way of transmission, by which the Registrar sends to the Registry information concerning only DS records.

The next sections describe the main EPP operations that are involved in the introduction of DNSSEC in .it, where a Registrar has passed the DNSSEC technical accreditation test and consequently is a "DNSSEC accredited" Registrar.

5.4   Login

Only a "DNSSEC accredited" Registrar can indicate in the EPP *Login* request the two following namespaces:

- **urn:ietf:params:xml:ns:secDNS-1.1**, concerning the standard extensions introduced by the EPP protocol;

- **http://www.nic.it/ITNIC-EPP/extsecDNS-1.0**, concerning extensions introduced by the .it Registry.

If a "DNSSEC accredited" Registrar does not indicate in the EPP *Login* request the above mentioned namespaces, they cannot send, in the EPP session, further requests containing extensions related to them.

An EPP *Login* request has therefore the XML format showed in Section 7.1.2 of the current document.

The responses obtained by the EPP server have a different header depending on whether the Registrar has indicated (see Section 7.1.4) or has not indicated (see Section 7.1.3) in the EPP *Login* request the above mentioned two namespaces.

5.5   Domain Create

The EPP *Domain Create* command has been extended with the addition, in the **<extension>** section, of the **<secDNS:create>** element (where secDNS is the prefix that identifies the reference to the secDNS-1.1 namespace), which can contain up to a maximum of 2 <**secDNS:Dsdata**> elements corresponding to DS records.
Therefore, an EPP *Domain Create* request for a .it domain name with the DNSSEC extension that makes use of the DS Data Interface, has the following XML format:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
```

```
<command>
  <create>
    <domain:create
    xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
    xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
    1.0.xsd">
    <domain:name>esempio.it</domain:name>
    <domain:period unit="y">1</domain:period>
    <domain:ns>
      <domain:hostAttr>
          <domain:156isualiz>x.dns.it</domain:156isualiz>
      </domain:hostAttr>
      <domain:hostAttr>
          <domain:156isualiz>y.dns.it</domain:156isualiz>
      </domain:hostAttr>
    </domain:ns>
    <domain:registrant>mm001</domain:registrant>
    <domain:contact type="admin">mm001</domain:contact>
    <domain:contact type="tech">mb001</domain:contact>
    <domain:authInfo>
        <domain:pw>22fooBAR</domain:pw>
    </domain:authInfo>
    </domain:create>
  </create>
  <extension>
    <secDNS:create
        xmlns:secDNS="urn:ietf:params:xml:ns:secDNS-1.1">
    <secDNS:dsData>
        <secDNS:keyTag>12345</secDNS:keyTag>
        <secDNS:alg>3</secDNS:alg>
        <secDNS:digestType>1</secDNS:digestType>
        <secDNS:digest>4347d0f8ba661234a8eadc005e2e1d1b646c9682</secDNS
        :digest>
    </secDNS:dsData>
    </secDNS:create>
  </extension>
  <clTRID>ABC-12345</clTRID>
</command>
</epp>
```

5.6 Domain Update

The EPP *Domain Update* command has been extended, indicating, in the **<extension>** section,
the **<secDNS:update>** element.

Therefore, an EPP *Domain Update* request for a .it domain name, with the DNSSEC extension
that makes use of the DS Data Interface, for which the replacement of the DS record currently
associated with another DS record was requested, has the following XML format (in the example
below it is requested to replace the current DS record with a new one):

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <command>
 <update>
   <domain:update
   xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
   xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
   1.0.xsd">
      <domain:name>esempio.it</domain:name>
```

```
      </domain:update>
    </update>
  <extension>
    <secDNS:update
     xmlns:secDNS="urn:ietf:params:xml:ns:secDNS-1.1">
     <secDNS:rem>
      <secDNS:dsData>
        <secDNS:keyTag>12345</secDNS:keyTag>
        <secDNS:alg>3</secDNS:alg>
        <secDNS:digestType>1</secDNS:digestType>
        <secDNS:digest>4347d0f8ba661234a8eadc005e2e1d1b646c9682</secDNS
        :digest>
      </secDNS:dsData>
     </secDNS:rem>
     <secDNS:add>
      <secDNS:dsData>
        <secDNS:keyTag>45063</secDNS:keyTag>
        <secDNS:alg>3</secDNS:alg>
        <secDNS:digestType>2</secDNS:digestType>
        <secDNS:digest>E9B696C3AC8644735BF0A6409BE6D77BBFB4142D667E0EB0
        D41AD75BCC9D0D43</secDNS:digest>
      </secDNS:dsData>
     </secDNS:add>
    </secDNS:update>
  </extension>
  <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

If the Registrar intends to request the removal of all DS records associated with the domain name, this is allowed through an EPP *Domain Update* operation in which, in **<secDNS:rem>** section, the **<secDNS:all>** element is used.

Example:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <command>
 <update>
   <domain:update
    xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
    xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
    1.0.xsd">
      <domain:name>esempio.it</domain:name>
   </domain:update>
 </update>
 <extension>
   <secDNS:update
    xmlns:secDNS="urn:ietf:params:xml:ns:secDNS-1.1">
    <secDNS:rem>
      <secDNS:all>true</secDNS:all>
    </secDNS:rem>
   </secDNS:update>
 </extension>
 <clTRID>ABC-12345</clTRID>
 </command>
</epp>
```

5.7   Domain Transfer

The introduction of DNSSEC does not imply any change to the formats of the EPP *Domain Transfer* request and response.

No restrictions are applied to transfers between "DNSSEC accredited" Registrars and "non DNSSEC accredited" Registrars.

The EPP *Domain Transfer* operation does not alter the DNS configuration: if the new Registrar wishes to change it, a new DNS configuration (with or without DNSSEC extension) can be submitted through an EPP *Update Domain* operation.

5.8   Domain Delete

The introduction of DNSSEC does not imply any change to the formats of EPP *Domain Delete* response and request.

5.9   Domain Info

In case of an EPP *Domain Info* request for a "signed" domain name, the request involves two distinct XML formats depending on whether the DNS configuration of the domain name is in the process of being validated or has already been validated.

The introduction of DNSSEC has involved the introduction of the element <**extsecDNS:infDsOrKeyToValidateData**> (described in the extsecDNS-1.0 namespace), which shows, for a given domain name, the configuration of the DS records that are in the process of validation by the DNS check service of the .it Registry.

An EPP *Domain Info* response of a "signed" domain name that has been registered but not validated by the DNS check service, and which therefore is in inactive/*dnsHold* status, has the following XML format:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
    xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
    xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
    xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
    xmlns:secDNS="urn:ietf:params:xml:ns:secDNS-1.1"
    xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
    xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
    xmlns:extsecDNS="http://www.nic.it/ITNIC-EPP/extsecDNS-1.0"
    xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0">
  <response>
    <result code="1000">
        <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:infData>
        <domain:name>esempio.it</domain:name>
        <domain:roid>ITNIC-306194</domain:roid>
        <domain:status s="inactive" lang="en"/>
        <domain:registrant>MM001</domain:registrant>
        <domain:contact type="admin">MM001</domain:contact>
        <domain:contact type="tech">MB001</domain:contact>
        <domain:clID>DEMO-REG</domain:clID>
        <domain:crID>DEMO-REG</domain:crID>
        <domain:crDate>2016-06-29T08:26:44.000+02:00</domain:crDate>
        <domain:exDate>2017-06-29T23:59:59.000+02:00</domain:exDate>
        <domain:authInfo>
            <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:infData>
```

```
        </resData>
        <extension>
            <extdom:infData>
                <extdom:ownStatus s="dnsHold" lang="en"/>
            </extdom:infData>
            <extdom:infNsToValidateData>
              <extdom:nsToValidate>
                <domain:hostAttr>
                    <domain:159isualiz>m.dns.it</domain:159isualiz>
                </domain:hostAttr>
                <domain:hostAttr>
                    <domain:159isualiz>j.dns.it</domain:159isualiz>
                </domain:hostAttr>
              </extdom:nsToValidate>
            </extdom:infNsToValidateData>
            <extsecDNS:infDsOrKeyToValidateData>
              <extsecDNS:dsOrKeysToValidate>
                <secDNS:dsData>
                    <secDNS:keyTag>12345</secDNS:keyTag>
                    <secDNS:alg>3</secDNS:alg>
                    <secDNS:digestType>1</secDNS:digestType>
                    <secDNS:digest>4347d0f8ba661234a8eadc005e2e1d1b646c968
                    2</secDNS:digest>
                </secDNS:dsData>
              </extsecDNS:dsOrKeysToValidate>
            </extsecDNS:infDsOrKeyToValidateData>
        </extension>
        <trID>
            <svTRID>9141b61b-5272-4d63-90b1-7cb2348f5b40</svTRID>
        </trID>
    </response>
</epp>
```

If the DNS validation (both authoritative name servers and DS records) is successful, the domain name is put into ok status and the EPP *Domain Info* response, in this case, takes the following XML format:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
    xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
    xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
    xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
    xmlns:secDNS="urn:ietf:params:xml:ns:secDNS-1.1"
    xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
    xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
    xmlns:extsecDNS="http://www.nic.it/ITNIC-EPP/extsecDNS-1.0"
    xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0">
  <response>
    <result code="1000">
        <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
        <domain:infData>
            <domain:name>esenpio.it</domain:name>
            <domain:roid>ITNIC-306194</domain:roid>
            <domain:status s="ok" lang="en"/>
            <domain:registrant>MM001</domain:registrant>
            <domain:contact type="admin">MM001</domain:contact>
            <domain:contact type="tech">MB001</domain:contact>
```

```
            <domain:ns>
              <domain:hostAttr>
                <domain:160isualiz>m.dns.it</domain:160isualiz>
              </domain:hostAttr>
              <domain:hostAttr>
                <domain:160isualiz>j.dns.it</domain:160isualiz>
              </domain:hostAttr>
            </domain:ns>
            <domain:clID>DEMO-REG</domain:clID>
            <domain:crID>DEMO-REG</domain:crID>
            <domain:crDate>2016-06-29T08:26:44.000+02:00</domain:crDate>
            <domain:upID>DEMO-REG</domain:upID>
            <domain:160isual>2016-06-
            29T08:26:45.000+02:00</domain:160isual>
            <domain:exDate>2017-06-29T23:59:59.000+02:00</domain:exDate>
            <domain:authInfo>
                <domain:pw>22fooBAR</domain:pw>
            </domain:authInfo>
          </domain:infData>
      </resData>
      <extension>
        <secDNS:infData>
          <secDNS:dsData>
            <secDNS:keyTag>12345</secDNS:keyTag>
            <secDNS:alg>3</secDNS:alg>
            <secDNS:digestType>1</secDNS:digestType>
            <secDNS:digest>4347d0f8ba661234a8eadc005e2e1d1b646c9682</se
            cDNS:digest>
          </secDNS:dsData>
        </secDNS:infData>
      </extension>
      <trID>
          <svTRID>615ec859-f80d-41f2-b55f-0d7108b91cb6</svTRID>
      </trID>
   </response>
</epp>
```

If a "signed" domain name is subject to an EPP *Domain Update* operation in order to change the authoritative name servers and/or DS records, since in the pendingUpdate status a successfully validated DNS configuration already exists, the EPP *Domain Info* response can contain the <**domain:ns**> and <**extdom:infNsToValidateData**> elements (if name server change is requested) and <**secDNS:infData**> and <**extsecDNS:infDsOrKeyToValidateData**> elements (if DS records change is requested), at the same time.

The following example shows the result of an EPP *Domain Info* operation on a domain name for which authoritative name servers and DS records update were requested:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
    xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
    xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
    xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
    xmlns:secDNS="urn:ietf:params:xml:ns:secDNS-1.1"
    xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
    xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
    xmlns:extsecDNS="http://www.nic.it/ITNIC-EPP/extsecDNS-1.0"
    xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0">
  <response>
    <result code="1000">
        <msg lang="en">Command completed successfully</msg>
```

```
         </result>
         <resData>
             <domain:infData>
                 <domain:name>esenpio.it</domain:name>
                 <domain:roid>ITNIC-306194</domain:roid>
                 <domain:status s="pendingUpdate" lang="en"/>
                 <domain:registrant>MM001</domain:registrant>
                 <domain:contact type="admin">MM001</domain:contact>
                 <domain:contact type="tech">MB001</domain:contact>
                 <domain:ns>
                     <domain:hostAttr>
                         <domain:161isualiz>m.dns.it</domain:161isualiz>
                     </domain:hostAttr>
                     <domain:hostAttr>
                         <domain:161isualiz>j.dns.it</domain:161isualiz>
                     </domain:hostAttr>
                 </domain:ns>
                 <domain:clID>DEMO-REG</domain:clID>
                 <domain:crID>DEMO-REG</domain:crID>
                 <domain:crDate>2016-06-29T08:26:44.000+02:00</domain:crDate>
                 <domain:upID>DEMO-REG</domain:upID>
                 <domain:161isual>2016-06-
29T08:26:45.000+02:00</domain:161isual>
                 <domain:exDate>2017-06-29T23:59:59.000+02:00</domain:exDate>
                 <domain:authInfo>
                     <domain:pw>22fooBAR</domain:pw>
                 </domain:authInfo>
             </domain:infData>
         </resData>
         <extension>
             <extdom:infNsToValidateData>
                 <extdom:nsToValidate>
                     <domain:hostAttr>
                         <domain:161isualiz>n.dns.it</domain:161isualiz>
                     </domain:hostAttr>
                     <domain:hostAttr>
                         <domain:161isualiz>k.dns.it</domain:161isualiz>
                     </domain:hostAttr>
                 </extdom:nsToValidate>
             </extdom:infNsToValidateData>
             <secDNS:infData>
                 <secDNS:dsData>
                     <secDNS:keyTag>12345</secDNS:keyTag>
                     <secDNS:alg>3</secDNS:alg>
                     <secDNS:digestType>1</secDNS:digestType>
                     <secDNS:digest>4347d0f8ba661234a8eadc005e2e1d1b646c9682</se
                     cDNS:digest>
                 </secDNS:dsData>
             </secDNS:infData>
             <extsecDNS:infDsOrKeyToValidateData>
                 <extsecDNS:dsOrKeysToValidate>
                     <secDNS:dsData>
                         <secDNS:keyTag>45063</secDNS:keyTag>
                         <secDNS:alg>3</secDNS:alg>
                         <secDNS:digestType>2</secDNS:digestType>
                         <secDNS:digest>E9B696C3AC8644735BF0A6409BE6D77BBFB4142D
                         667E0EB0D41AD75BCC9D0D43</secDNS:digest>
                     </secDNS:dsData>
                 </extsecDNS:dsOrKeysToValidate>
             </extsecDNS:infDsOrKeyToValidateData>
```

```
        </extension>
        <trID>
            <svTRID>1e53552c-585a-4a48-8c45-4b2068ea057d</svTRID>
        </trID>
    </response>
</epp>
```

The following example shows, on the contrary, the result of an EPP *Domain Info* operation on a domain name for which only the removal of all DS records was requested:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
    xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
    xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
    xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
    xmlns:secDNS="urn:ietf:params:xml:ns:secDNS-1.1"
    xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
    xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
    xmlns:extsecDNS="http://www.nic.it/ITNIC-EPP/extsecDNS-1.0"
    xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0">
  <response>
    <result code="1000">
        <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
        <domain:infData>
          <domain:name>esenpio.it</domain:name>
          <domain:roid>ITNIC-306194</domain:roid>
          <domain:status s="pendingUpdate" lang="en"/>
          <domain:registrant>MM001</domain:registrant>
          <domain:contact type="admin">MM001</domain:contact>
          <domain:contact type="tech">MB001</domain:contact>
          <domain:ns>
            <domain:hostAttr>
              <domain:162isualiz>m.dns.it</domain:162isualiz>
            </domain:hostAttr>
            <domain:hostAttr>
              <domain:162isualiz>j.dns.it</domain:162isualiz>
            </domain:hostAttr>
          </domain:ns>
          <domain:clID>DEMO-REG</domain:clID>
          <domain:crID>DEMO-REG</domain:crID>
          <domain:crDate>2016-06-29T08:26:44.000+02:00</domain:crDate>
          <domain:upID>DEMO-REG</domain:upID>
          <domain:162isual>2016-06-
29T08:26:45.000+02:00</domain:162isual>
          <domain:exDate>2017-06-29T23:59:59.000+02:00</domain:exDate>
          <domain:authInfo>
              <domain:pw>22fooBAR</domain:pw>
          </domain:authInfo>
        </domain:infData>
    </resData>
    <extension>
      <secDNS:infData>
        <secDNS:dsData>
          <secDNS:keyTag>12345</secDNS:keyTag>
          <secDNS:alg>3</secDNS:alg>
          <secDNS:digestType>1</secDNS:digestType>
          <secDNS:digest>4347d0f8ba661234a8eadc005e2e1d1b646c9682</se
          cDNS:digest>
```

```
            </secDNS:dsData>
          </secDNS:infData>
          <extsecDNS:infDsOrKeyToValidateData>
              <extsecDNS:remAll/>
          </extsecDNS:infDsOrKeyToValidateData>
        </extension>
        <trID>
            <svTRID>3774a765-5418-4f43-a999-5d2f337560c0</svTRID>
        </trID>
    </response>
</epp>
```

5.10 Polling

In case of an EPP *Poll (op="req")* request, the XML format of the messages concerning the result of the DNS validation which foresees the validation of the DS records other than the one of the nameservers, has been modified.

In particular, the formats of the two following messages have been modified:

- **DNS check ended unsuccessfully**, message of DNS check ended with failure;

- **DNS check ended successfully with warning**, message of DNS check successfully completed but with warning.

The XML format of the above mentioned messages has been modified by adding, in the **<extension>** section, the <**extsecDNS:secDnsErrorMsgData**> element. This element appears after the <**extdom:dnsErrorMsgData**> element in the case that the message is "**DNS check ended unsuccessfully**" and after the <**extdom:dnsWarningMsgData**> element in the case that the message is "**DNS check ended successfully with warning**". In the following two examples, the <**extsecDNS:secDnsErrorMsgData**> element is reported.

The following example shows the case where the "alg" field value of the DS record submitted via an EPP Domain Create/Update command is different from the corresponding value in the KSK ("Key Signing Key"):

```
<extsecDNS:secDnsErrorMsgData>
  <extsecDNS:dsOrKeys>
    <secDNS:dsData>
      <secDNS:keyTag>33138</secDNS:keyTag>
      <secDNS:alg>8</secDNS:alg>
      <secDNS:digestType>2</secDNS:digestType>
      <secDNS:digest>516DE15A6897FE168F34FBE7E084B852D78321A89542A28C4
      DE19A6C696C0C97</secDNS:digest>
    </secDNS:dsData>
  </extsecDNS:dsOrKeys>
  <extsecDNS:tests>
    <extsecDNS:test name="DNSKEYQueryAnswerTest" status="SUCCEEDED">
    …
    </extsecDNS:test>
    <extsecDNS:test name="DSRecordValidationTest" status="FAILED">
      <extsecDNS:nameserver name="ns1.pubtest.nic.it."
      status="FAILED">
        <extsecDNS:detail status="FAILED" queryId="11">Algorithm
        mismatch for Key-id '33138': KSK algorithm '10' doesn't match
        with DS algorithm '8'</extsecDNS:detail>
      </extsecDNS:nameserver>
      <extsecDNS:nameserver name="ns2.pubtest.nic.it."
      status="FAILED">
        <extsecDNS:detail status="FAILED" queryId="12">Algorithm
```

```
        mismatch for Key-id '33138': KSK algorithm '10' doesn't match
        with DS algorithm '8'</extsecDNS:detail>
      </extsecDNS:nameserver>
    </extsecDNS:test>
    <extsecDNS:test name="DNSKEYSignatureValidationTest"
    status="SUCCEEDED">
    …
    </extsecDNS:test>
    <extsecDNS:test name="SOASignatureValidationTest"
    status="SUCCEEDED">
    …
    </extsecDNS:test>
    <extsecDNS:test name="NSSignatureValidationTest"
    status="SUCCEEDED">
    …
    </extsecDNS:test>
  </extsecDNS:tests>
  <extsecDNS:queries>
  …
  </extsecDNS:queries>
</extsecDNS:secDnsErrorMsgData>
```

The following example shows the case where the digest value in the DS record submitted via EPP Domain Create/Update is different from the corresponding value generated by the KSK ("Key Signing Key"):

```
<extsecDNS:secDnsErrorMsgData>
  <extsecDNS:dsOrKeys>
    <secDNS:dsData>
      <secDNS:keyTag>55416</secDNS:keyTag>
      <secDNS:alg>10</secDNS:alg>
      <secDNS:digestType>2</secDNS:digestType>
      <secDNS:digest>516DE15A6897FE168F34FBE7E084B852D78321A89542A28C
      4DE19A6C696C0C97</secDNS:digest>
    </secDNS:dsData>
  </extsecDNS:dsOrKeys>
  <extsecDNS:tests>
    <extsecDNS:test name="DNSKEYQueryAnswerTest" status="SUCCEEDED">
    …
    </extsecDNS:test>
    <extsecDNS:test name="DSRecordValidationTest" status="FAILED">
      <extsecDNS:nameserver name="ns1.pubtest.nic.it."
      status="FAILED">
        <extsecDNS:detail status="FAILED" queryId="11">Digest mismatch
        for Key-id '55416': digest generated from KSK
        '9D2E9A5DA30CBE4606DDC7B450F70243BFD18A68ECC53D112A6F9915617B2
        556' is different from DS record digest
        '516DE15A6897FE168F34FBE7E084B852D78321A89542A28C4DE19A6C696C0
        C97'</extsecDNS:detail>
      </extsecDNS:nameserver>
      <extsecDNS:nameserver name="ns2.pubtest.nic.it."
      status="FAILED">
        <extsecDNS:detail status="FAILED" queryId="12">Digest mismatch
        for Key-id '55416': digest generated from KSK
        '9D2E9A5DA30CBE4606DDC7B450F70243BFD18A68ECC53D112A6F9915617B2
        556' is different from DS record digest
        '516DE15A6897FE168F34FBE7E084B852D78321A89542A28C4DE19A6C696C0
        C97'</extsecDNS:detail>
      </extsecDNS:nameserver>
```

```
    </extsecDNS:test>
    <extsecDNS:test name="DNSKEYSignatureValidationTest"
    status="SUCCEEDED">
    …
    </extsecDNS:test>
    <extsecDNS:test name="SOASignatureValidationTest"
    status="SUCCEEDED">
    …
    </extsecDNS:test>
    <extsecDNS:test name="NSSignatureValidationTest"
    status="SUCCEEDED">
    …
    </extsecDNS:test>
  </extsecDNS:tests>
  <extsecDNS:queries>
  …
  </extsecDNS:queries>
</extsecDNS:secDnsErrorMsgData>
```

If, in the EPP *Login* request, the "DNSSEC accredited" Registrar has not indicated the two namespaces related to the DNSSEC exstensions and they wish to examine, through an EPP *Poll (op="req")* request, a message containing the exstension concerning the extsecDNS-1.0 namespace, they will receive a message of error.

5.11 Checks performed by the EPP server on the DS records

The system verifies that the requests are compatible with:

- the constraints present in the XML Schema secDNS-1.1;

- the system verifies the following additional restrictions:
  - the EPP *Login* request must contain also the following two namespaces:
    - urn:ietf:params:xml:ns:secDNS-1.1;
    - http://www.nic.it/ITNIC-EPP/extsecDNS-1.0;
  - the value of the *keyTag* field of a <secDNS:dsData> element must be in the interval from 0 to 65535;
  - the value of the *digestType* field of a <secDNS:dsData> element must fulfil what is indicated in Section 5.1 ;
  - the value of the *alg* field of a <secDNS:dsData> element must fulfil what is indicated in Section 5.1 ;
  - the length of the value of the *digest* field of a <secDNS:dsData> element must be compatible with the *digest type*;
  - there must not be 2 <secDNS:dsData> elements containing the same values for the foreseen 4 values;

  - in the EPP *Domain Create* request:
    - the <secDNS:create> element must not contain the <secDNS:maxSigLife> element;
    - the <secDNS:create> element must not contain a <secDNS:keyData> element in place of or within a <secDNS:dsData> element;
    - the number of DS records per domain name after a *Domain Create* must not exceed the maximum limit specified in the MAX_DS_IN_CREATE parameter described in the table included in Section "6.11 Other useful parameters";

  - in the EPP *Domain Update* request:
    - the <secDNS:update> element must not contain the <secDNS:maxSigLife> element;
    - the <secDNS:update> element must not contain a <secDNS:keyData> element in place of or within a <secDNS:dsData> element;
    - the <secDNS:update> element must not contain the *urgent* attribute;

- the <secDNS:update> element must contain the <secDNS:add> element and/or the <secDNS:rem> element;
- the <secDNS:rem> element must contain single <secDNS:dsData> elements or the <secDNS:all> element;
- the <secDNS:add> element must not contain a DS record already associated with the domain name;
- the <secDNS:rem> element must not contain a DS record not yet associated with the domain name;
- the number of DS records per domain name after a *Domain Update* must not exceed the maximum limit specified in the MAX_DS_IN_UPDATE parameter described in the table included in Section "6.11 Other useful parameters".

5.12 Validation of DNS configuration

The introduction of DNSSEC has also implications on the procedure of the DNS configuration validation. In fact, in case of "signed" domain names, it foresees further checks in addition to those already existing and described in Section 3.1.2.6.

In particular, it verifies that:

- the algorithm that appears in the DS record must be the same as the one which appears in the DNSKEY 257 record;

- the digest of the DS records indicated in the registration/modification of a domain name are congruent with the content of DNSKEY 257 record:
  - o the above control is carried out for all declared authoritative name servers for the zone concerned;

- the digest of SOA record corresponds to the one indicated in the RRSIG SOA record:
  - o the above control is carried out for all declared authoritative name servers for the zone concerned;

- the digest of the NS records corresponds to the one indicated in the RRSIG NS records:
  - o the above control is carried out for all declared authoritative name servers for the zone concerned;

- the digest of the DNSKEY records corresponds to the one indicated in the RRSIG DNSKEY records:
  - o the above control is carried out for all declared authoritative name servers for the zone concerned;

- the signatures of the RRSIG records are not expired or in the future.

The list of the *DNSSEC* checks carried out for each host subjected to the DNS validation by the DNS validator of the Registry is the following:

- *DNSKEYQueryAnswerTest*: it verifies which nameservers have replied to the DNSKEY queries. The answer must be authoritative and containing a NOERROR return code.

- *DSRecordValidationTest*: it verifies the correctness of the DS records compared to the keys contained in the zone

- *DNSKEYSignatureValidationTest*: it verifies the correctness of the signature of the DNSKEY records

- *SOASignatureValidationTest*: it verifies the correctness of the signature of the SOA record

- *NSSignatureValidationTest*: it verifies the correctness of the signature of the NS records.

6   Appendix A - The EPP protocol

The EPP protocol is a "stateful" XML application protocol in which the information exchanged between client and server includes the concept of status, and both systems keep track of the status of the communication session. The protocol can support a variety of transport protocols.

Initially the clients identify themselves to the server, using secure connections, and are authenticated, and then exchange with the server information on the services implemented and the objects manipulated. The clients then start the sessions based on a series of "request-response" exchanges.

All the EPP commands are atomic (there is no partial success or failure even though the effect of a transaction might not be completed by the conclusion of the corresponding request).

The basic elements of the protocol are:

● Identification of the services offered by the server

● Commands

● Responses

● Extensions to the protocol

The EPP uses XML namespaces to provide an extensible management paradigm of objects, and for identifying XML Schema required to parse and validate the XML content both of the base protocol and of any extensions.

6.1   XML Schemas supported by Registry's EPP server

All definitions of commands or objects used in the implementation of the EPP protocol of the Registry's synchronous system are contained in XML Schemas.

Since the EPP protocol is extensible, all extensions to the standard are, in turn, described in other XML Schema.

It is necessary therefore that the client of the synchronous system supports the following XML Schema:

● standard XML Schema of the EPP protocol:
  o epp-1.0.xsd: Extensible Provisioning Protocol v1.0 schema
  o domain-1.0.xsd: Extensible Provisioning Protocol v1.0 domain provisioning schema
  o contact-1.0.xsd: Extensible Provisioning Protocol v1.0 contact provisioning schema
  o eppcom-1.0.xsd: Extensible Provisioning Protocol v1.0 shared structures schema

● XML Schema that cover the extension for the management of the grace period adopted by the Registry:
  o *rgp-1.0.xsd*: Extensible Provisioning Protocol v1.0 domain name extension schema for Registry grace period processing

● XML Schema that cover extensions to the EPP protocol defined by the Registry:
  o *extepp-2.0.xsd*: IT-NIC Extensible Provisioning Protocol v1.0 EPP extension.
  o *extcon-1.0.xsd*: IT-NIC Extensible Provisioning Protocol v1.0 contact extension
  o *extdom-2.0.xsd*: IT-NIC Extensible Provisioning Protocol v1.0 domain extension

6.2   EPP Commands

EPP commands are processed by the server in the order they are received from the client.

For each request sent by the client, the server sends an immediate response that confirms the receipt and processing of the request.

There are three categories of EPP commands that the client may submit to the server:

- commands for session management (login, logout, hello)

- commands for registering and changing of contact and domain objects

- commands for querying the server that do not change contact and domain objects

In cases where the request must continue offline, in addition to sending the response, the server will notify the client that the command was received and processed, but that the requested action is not yet complete. Subsequently, the server notifies the client that the offline processing is complete.

Request and response examples will be shown for each command.

6.3   Structure of EPP requests and responses

Each request sent by the client contains the following elements:

- An initial standard
  ```
  <?xml version="1.0" encoding="UTF-8" standalone="no"?>
  <epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  ```

- An element that may be of two types:
  - `<hello>`: to send a hello
  - `<command>`: to send the request for any other transaction. This element, together with other elements of the command, also contains the following:

    - An optional `<extension>` which can be used for the extensions defined by the server to the requests of the commands
    - An optional `<clTRID>` (client transaction identifier) that can be used by the client to logically identify a transaction. It is an alphanumeric string with a minimum length 3 and maximum of 64 characters. Example: `<clTRID>ABC-12345</clTRID>`

- A final standard `</epp>`

Each response from the server contains the following elements:

- An initial standard header

  ```
  <?xml version="1.0" encoding="UTF-8" ?>
  <epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  ```

- A number of different elements depending on the request received:
  - in response to an `<hello>` command:
    - a <greeting>
  - in response to any other command:
    - one or more `<result>` elements reporting the success or failure of the command requested. If the requested command has been completed successfully, there will only be one `<result>`. Conversely, in the event of failure, there may be multiple `<result>`.

      Each `<result>` contains:
      - an attribute `code`: return code of the request (see Section 6.9);
      - `<msg>`: an element with a textual description of the return code in the language specified by the optional `lang`;

- zero or more `<value>`: identifying the elements (including XML tag and value) included in the request that caused the error;
  - zero or more `<extValue>`: that can be used to provide additional diagnostic information, containing in turn:
- o `<value>`: which identifies an element (including XML tag and value) included in the request that caused the error;
- o `<reason>`: with a textual description of the reason for the error in the language specified by the optional `lang`;
  - `<msgQ>`: an optional element that describes the messages in the polling queue of the Registrar. If the polling queue is empty, `<msgQ>` must not be present. If the queue is not empty, `<msgQ>` must be present in response to a Poll Req and may be present in commands other than the query command of the queue (Poll Req) . Each `<msgQ>` contains the following:
    - an `id` attribute, which uniquely identifies the message within the queue;
    - an attribute `count`, which is the number of messages in queue;
    - a `<qDate>`, in the response to the command Poll Req, which contains the date when the message was inserted in the queue;
    - a `<msg>`, in the response to the command Poll Req, which contains a textual description of the return code in the language specified by the optional `lang`.

- `<resData>`: an optional element that contains the specific elements of the response associated with the command requested.

- `<extension>`: an optional element that can be used for the extensions defined by the server in response to the commands.

- An optional `<trID>` (transaction identifier) which returns the possible `clTRID` assigned by the client in the request and a `svTRID` (server transaction identifier) always and uniquely assigned by the server.

- A final standard element `</epp>`.

- Two new elements were defined in the namespace extepp-2.0 in order to obtain a more structured error message in comparison with the previous version:
  - o the `<wrongValue>` element within the `<value>` element, is structured as follows:
    - `<element>`: containing the name of the missing tag or with a wrong value;
    - `<namespace>`: containing the namespace of the missing tag or with a wrong value;
    - `<value>`: containing a wrong value;
  - o the `<reasonCode>` element within the `<value>` element of the `<extValue>` element that contains the reason code of the implementation of the .it Registry .

6.3.1   Example of a response with message in queue

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <msgQ id="227" count="1">
```

```
        <qDate>2013-02-21T14:20:00+01:00</qDate>
        <msg lang="en">DNS check ended successfully</msg>
      </msgQ>
      <trID>
        <svTRID>f1a98ba5-08f9-4ea8-8e6c-e798c6af3cad</svTRID>
      </trID>
    </response>
  </epp>
```

6.4 Pending Actions

The EPP server of the Registry provides for three pending actions subsequent to a request being sent:

- Registering a domain name with DNS configuration validated

- Changing the DNS configuration of an existing domain name

- Changing the Registrar (with or without simultaneous change in the Registrant) of an existing domain name

There are no pending actions affecting transactions on the contacts.
The notification of completion of the pending (with success or failure) takes place via a message that the server includes in the "polling queue" (see Section 6.7).
Other notifications sent by the server to the client regard the status switches of domain objects after delays.

6.5 Charging and Billing

The implementation of the registration system of the Registry stipulates that the following transactions on domain names shall be billed:

- Registration of a new domain name

- Change of Registrar (with or without the simultaneous change of the Registrant)

- Recovery from redemption period (following a request for deletion)

- Maintenance (automatic renewal of a domain name registered in the Registry Database)

The first three transactions are requests made by the Registrar through the EPP protocol, while the fourth is performed by the Registry on the expiry of the period of validity of the domain name. In the event of a change of Registrar with a trade extension (change of the Registrar with the simultaneous change of the Registrant), the cost charged is only related to the change of the Registrar.
It is necessary to distinguish a charge for a transaction from its actual billing:

- **debit**, means the action of taking from the Registrar's credit, the cost of a transaction including any VAT. In order to keep the amount of the credit of the Registrar constantly updated, the transactions listed above are immediately debited.

- **invoicing/billing**, this means reporting such costs in an invoice sent to the Registrar. The invoice contains all the transactions carried out by the Registrar in respect of a particular payment.

This separation is necessary since billing may not take place at the same time as charging. For example, for changes of the Registrar (case 2) and automatic renewal (case 4), charging and billing are not simultaneous:

- *automatic renewal*: if the domain name is in a status that permits it, the debit takes place at the expiry of the domain name. The billing, however, takes place on the expiry of the grace

period - autoRenewPeriod. If during this period, the domain name is transferred to another Registrar or deleted, the cost of renewal is re-accredited to the Registrar and the renewal is not invoiced.

- *change of Registrar*: the debit of the transaction takes place at the time of the request to change the Registrar. Invoicing only occurs when the transaction is successful. If the transaction fails, the cost of the change of Registrar will be re-credited to the Registrar that made the request, and the transaction is not invoiced.

In cases 1 and 3 charging and billing take place at the same time.

6.6 Time Periods

For some status switches and for the management of certain information regarding the objects registered in the Registry Database (registrars, contacts, domains), the Registry's synchronous server refers to specific time periods which are listed below:

Name	Meaning	Unit	Value
PENDING_UPDATE_PERIOD	Maximum period in pendingUpdate	dd	5
REDEMPTION_PERIOD	Maximum period in pendingDelete/*redemption period*	dd	30
PENDING_TRANSFER_PERIOD	Maximum period in pendingTransfer	dd	1
AUTO_RENEW_PERIOD	Grace period after domain name automatical renewal	dd	15
PENDING_DELETE_PERIOD	Maximum period in pendingDelete/*pendingDelete* established by the Drop Time process that provides the cancellation of the domain names at scheduled times	-	-
CHALLENGED_PERIOD	Maximum period in challenged	dd	180
REVOKED_PERIOD	Maximum period in inactive/*revoked*	dd	30
TO_BE_REASSIGNED_PERIOD	Maximum period in inactive/*toBeReassigned*	dd	30
NO_REGISTRAR_PERIOD	Maximum period in inactive/*noRegistrar*	dd	60
NOT_RENEWED_PERIOD	Maximum period in inactive/*notRenewed*	dd	30
UNLINKED_CONTACT_PERIOD	Maximum user disconnection time length	dd	60
BILLING_LOW_CREDIT_WARNING _PERIOD	Number of days taken into account by the system to calculate the credit threshold of warning required to maintain their own domain names.	Dd	4
PASSWD_VALIDITY_PERIOD	Password validity period	dd	180
PASSWD_REMINDER_PERIOD	Time period to calculate the date when the server will notify the client of imminent expiry of password	dd	15
OLD_MESSAGE_PERIOD	Maximum message stay period in the polling queue	dd	60
RECENTLY_DELETED_DOMAINS_ PERIOD	Minimum period during which it is not allowed to send to the production server a Create Domain request for a domain that can be registered once more after its deletion. The Create Domain request must be sent to a special server.	Dd	7
ACCREDITATION_TEST_PERIOD	Maximum period for executing the accreditation test	min	60

6.7 Polling queue

The EPP protocol requires that the server informs the client of all the events that occur offline, with respect to the normal "request-response".

The client receives a notification through the insertion of messages in the Registrar's polling queue, for which the protocol makes available two commands:

- *Poll Req*: for consulting the first message in the queue (the oldest);
- *Poll Ack*: for removing a message identified by a specific ID from the queue.

The synchronous system server implements two classes of messages:

- *the first concerns the Registrar* i.e. those messages that relate to the authentication or the Registrar's credit;
- *the second concerns domain names of a Registrar* i.e. those messages that relate to actions started, currently under way, or completed on a particular domain name.

6.7.1 Messages concerning the Registrar

The table summarizes the messages that relate to the Registrar.

Event	Message
Registrar password is about to expire	Password will expire soon
The Registrar sent a Login Request that contains obsolete namespaces	Wrong namespace in Login Request
Current credit is under the personal threshold set by the Registrar	Credit is under the threshold set by the Registrar
Low credit: credit threshold of warning reached	The Registrar is in low credit
Credit ~ 0	Out of funds: only not invoiced operations are allowed

In case of events related to the Registrar credit, as shown in the previous table, the system not only inserts a message in the polling queue but also sends an e-mail to the billing contacts that the Registrar has created in the RAIN-NG portal.

6.7.2 Messages concerning the domain names of a Registrar

The table summarizes the correspondences between the events of the EPP server and messages posted in the polling queue.

Event	Start status	Destination status	Message
Successful registration of a IDN domain name containing *remapped* **characters**	**--**	**inactive/***dnsHold*	**Requested IDN domain contains remapped chars**
DNS check OK	**inactive/***dnsHold*	**ok**	**DNS check ended successfully** **DNS check ended successfully with warning**

DNS check KO	inactive/*dnsHold*	inactive/*dnsHold*	**DNS check ended unsuccessfully**
Reception of an Update Domain for change host and/or DS record	**ok**	**pendingUpdate**	**pendingUpdate is started**
DNS check OK	**pendingUpdate**	**ok** *(new DNS configuration)*	**DNS check ended successfully**
			DNS check ended successfully with warning
DNS check KO	**pendingUpdate**	**pendingUpdate**	**DNS check ended unsuccessfully**
Expiry pendingUpdate	**pendingUpdate**	**ok** *(old DNS configuration)*	**pendingUpdate is expired**
Reception of a Delete Domain	**ok**	**pendingDelete/*redemptionPeriod***	**redemptionPeriod is started**
	ok/*autoRenewPeriod*		
	inactive/*dnsHold*		
	inactive/*dnsHold*/*autoRenewPeriod*		
Expiry redemptionPeriod	**pendingDelete/*redemptionPeriod***	**pendingDelete/*pendingDelete***	**redemption Period is expired**
	pendingDelete/ *redemptionPeriod*/ *challenged*	**inactive/*toBeReassigned***	
Expiry pendingDelete	**pendingDelete/*pendingDelete***	**--**	**Domain has been deleted** *(for the Registrar that manages the domain name)*
			Lost delegation *(for the Registrars that manage those domain names whose nameservers are subordinate to the cancelled domain name)*
Reception of a Transfer Domain (op=request)	**ok**	**pendingTransfer**	**Domain transfer has been requested: pendingTransfer is started** *(for the Registrar that manages the domain*
	ok/*noRegistrar*		
	inactive/*noRegistrar*		

	inactive/*notRenewed*		*name)*
	inactive/*dnsHold*		
	inactive/*dnsHold*/*noRegistrar*		
Reception of a Transfer Domain (op=reject)	**pendingTransfer**	**inactive/*noRegistrar*** *(if the reject operation was performed after the expiry of the auto renew period)*	**Domain transfer has been rejected** *(for the Registrar that requested the transfer)*
		ok *(if the transfer did not begin in auto renew period)*	
		ok/*noRegistrar* *(if the transfer did not begin in ok/noRegistrar)*	
		inactive/*notRenewed* *(if credit = 0)*	
		inactive/*dnsHold* *(if the transfer began in inactive/dnsHold)*	
		inactive/*dnsHold*/*noRegistrar* *(if the transfer began in inactive/dnsHold/noRegistrar)*	
	pendingTransfer/*autoRenewPeriod*	**ok/*autoRenewPeriod*** *(if the domain name has a valid DNS configuration)*	
		inactive/*dnsHold*/*autoRenewPeriod* *(if the domain name does not have a valid DNS configuration)*	
Reception of a Transfer Domain (op=cancel)	**pendingTransfer**	**inactive/*noRegistrar*** *(if the cancel operation was performed after the expiry of the auto renew period)*	**Domain transfer has been cancelled** *(for the Registrar that manages the domain name)*
		ok *(if the transfer did not begin in auto renew period)*	
		ok/*noRegistrar* *(if the transfer began in ok/noRegistrar)*	

		inactive/*notRenewed* *(if credit = 0)*	
		inactive/*dnsHold* *(if the transfer began in inactive/dnsHold)*	
		inactive/*dnsHold*/*noRegistrar* *(if the transfer began in inactive/dnsHold/noRegistrar)*	
	pendingTransfer/*autoRenewPeriod*	ok/*autoRenewPeriod* *(if the domain name has a valid DNS configuration)*	
		inactive/*dnsHold*/*autoRenewPeriod* *(if the domain name does not have a valid DNS configuration)*	
Reception of a Transfer Domain (op=approve)	**pendingTransfer**	**ok** *(if the domain name has a valid DNS configuration)*	**Domain transfer has been executed** *(for the Registrar that requested the transfer)*
		inactive/*dnsHold* *(if the domain name does not have a valid DNS configuration)*	**Domain transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name** *(for the Registrar that manages the domain name)*
Expiry pendingTransfer	**pendingTransfer**	**ok** *(if the domain name has a valid DNS configuration)*	**Domain transfer is expired: transfer has been executed** *(for the Registrar that requested the transfer)*
		inactive/*dnsHold* *(if the domain name does not have a valid DNS configuration)*	**Domain transfer is expired: transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name** *(for the Registrar that manages the domain name)*
Reception of a Transfer Domain (op=request with ext. Trade)	**ok** **ok/*noRegistrar***	**pendingTransfer**	**Domain and trade transfer has been requested: pendingTransfer is**

	inactive/*noRegistrar*		**started** *(for the Registrar that manages the domain name)*
	inactive/*notRenewed*		
	inactive/*dnsHold*		
	inactive/*dnsHold*/*noRegistrar*		
Reception of a Transfer Domain (op=reject) for Domain and Trade Transfer	**pendingTransfer**	**inactive/*noRegistrar*** *(if the reject operation was performed after the expiry of the auto renew period)*	**Domain and trade transfer has been rejected** *(for the Registrar that requested the transfer)*
		ok *(if the transfer did not begin in auto renew period)*	
		ok/*noRegistrar* *(if the transfer began in ok/noRegistrar)*	
		inactive/*notRenewed* *(if credit = 0)*	
		inactive/*dnsHold* *(if the transfer began in inactive/dnsHold)*	
		inactive/*dnsHold*/*noRegistrar* *(if the transfer began in inactive/dnsHold/noRegistrar)*	
	pendingTransfer/*autoRenewPeriod*	**ok/*autoRenewPeriod*** *(if the domain name has a valid DNS configuration)*	
		inactive/*dnsHold*/*autoRenewPeriod* *(if the domain name does not have a valid DNS configuration)*	
Reception of a Transfer Domain (op=cancel) for Domain and Trade Transfer	**pendingTransfer**	**inactive/*noRegistrar*** *(if the cancel operation was performed after the expiry of the auto renew period)*	**Domain and trade transfer has been cancelled** *(for the Registrar that manages the domain name)*
		ok *(if the transfer did not begin in auto renew period)*	

		ok/*noRegistrar* *(if the transfer began in ok/noRegistrar)*	
		inactive/*notRenewed* *(if credit = 0)*	
		inactive/*dnsHold* *(if the transfer began in inactive/dnsHold)*	
		inactive/*dnsHold*/*noRegistrar* *(if the transfer began in inactive/dnsHold/noRegistrar)*	
	pendingTransfer/*autoRenewPeriod*	**ok/*autoRenewPeriod*** *(if the domain name has a valid DNS configuration)*	
		inactive/*dnsHold*/*autoRenewPeriod* *(if the domain name does not have a valid DNS configuration)*	
Reception of a Transfer Domain (op=approve) for Domain and Trade Transfer	**pendingTransfer**	**ok** *(if the domain name has a valid DNS configuration)*	**Domain and trade transfer has been executed** *(for the Registrar that requested the transfer)*
		inactive/*dnsHold* *(if the domain name does not have a valid DNS configuration)*	**Domain and trade transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name** *(for the Registrar that manages the domain name)*
Expiry pendingTransfer for Domain and Trade Transfer	**pendingTransfer**	**ok** *(if the domain name has a valid DNS configuration)*	**Domain and trade transfer is expired: transfer has been executed** *(for the Registrar that requested the transfer)*

		inactive/*dnsHold* *(if the domain name does not have a valid DNS configuration)*		**Domain and trade transfer is expired: transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name** *(for the Registrar that manages the domain name)*
Expiry domain name and credit > 0	**ok** / **pendingUpdate** / **pendingTransfer** / **inactive/*dnsHold***	**ok** / **pendingUpdate** / **pendingTransfer** / **inactive/*dnsHold***	*auto Renew Period*	**autoRenewPeriod is started**
	pendingDelete/*redemptionPeriod*	**pendingDelete/*redemptionPeriod***		
Expiry domain name and credit = 0	**ok**	**inactive/*notRenewed***		**Not Renewed is started**
Expiry autoRenewPeriod	**ok** / **pendingUpdate** / **pendingTransfer** / **inactive/*dnsHold***	*auto Renew Period* / **ok** / **pendingUpdate** / **pendingTransfer** / **inactive/*dnsHold***		**autoRenewPeriod is expired**
	pendingDelete/*redemptionPeriod*	**pendingDelete/*redemptionPeriod***		
Expiry toBeReassigned	**inactive/*toBeReassigned***	**pendingDelete/*pendingDelete***		**Reassignation is expired**
Expiry revoked	**inactive/*revoked***	**pendingDelete/*pendingDelete***		**Revoke is expired**
	inactive/*revoked/challenged*	**inactive/*toBeReassigned***		
Expiry notRenewed	**inactive/*notRenewed***	**pendingDelete/*pendingDelete***		**Not Renewed is expired**
	inactive/*notRenewed/challenged*	**inactive/*toBeReassigned***		

Registrar is not active	**--**	**ok/*noRegistrar***	**No Registrar is started**
		inactive/dnsHold/noRegistrar	
Reception of a Transfer Domain (op=reject) for Domain and Trade Transfer *(if the transfer began in autoRenewPeriod and the domain name is not in autoRenewPeriod)*	**pendingTransfer**	**inactive/*noRegistrar***	**No Registrar is started**
Expiry noRegistrar	**inactive/*noRegistrar***	**pendingDelete/*pendingDelete***	**No Registrar is expired**
	inactive/*noRegistrar/challenged*	**inactive/*toBeReassigned***	
Credit refunded	**inactive/*notRenewed***	**ok** *(if the domain name is not in auto renew period and has a valid DNS configuration)*	**Not Renewed is ended**
		ok/*autoRenewPeriod* *(if the domain name is in auto renew period and has a valid DNS configuration)*	
		inactive/*dnsHold* *(if the domain name is not in auto renew period and does not have a valid DNS configuration)*	
		inactive/*dnsHold/autoRenewPeriod* *(if the domain name is in auto renew period and does not have a valid DNS configuration)*	
Revocation by the Registry	**ok**	**inactive/*revoked***	**Revoke is started**
	inactive/*dnsHold*		
	pendingTransfer		
	pendingUpdate		
	pendingDelete/*redemptionPeriod*		
	ok/*noRegistrar*		

Event	From state(s)		To state(s)		Result
	inactive/*noRegistrar*				
	inactive/dnsHold/noRegistrar				
	inactive/*notRenewed*				
Reception of a challenge request	*ok*		*ok*	**challenged**	**Challenge procedure is started**
	inactive/*dnsHold*		inactive/*dnsHold*		
	pendingTransfer		*pendingTransfer*		
	pendingUpdate		*pendingUpdate*		
	pendingDelete/ *redemptionPeriod*		**pendingDelete/** *redemptionPeriod*		
	ok/*noRegistrar*		ok/*noRegistrar*		
	inactive/dnsHold/noRegistrar		*inactive/dnsHold/noRegistrar*		
	inactive/*noRegistrar*		inactive/*noRegistrar*		
	inactive/*notRenewed*		inactive/*notRenewed*		
Challenge procedure terminated	*ok*	**challenged**	*ok*		**Challenge procedure is ended**
	inactive/*dnsHold*		inactive/*dnsHold*		
	pendingTransfer		*pendingTransfer*		
	pendingUpdate		*pendingUpdate*		
	pendingDelete/ *redemptionPeriod*		**pendingDelete/** *redemptionPeriod*		
	ok/*noRegistrar*		ok/*noRegistrar*		
	inactive/dnsHold/noRegistrar		*inactive/dnsHold/noRegistrar*		
	inactive/*noRegistrar*		inactive/*noRegistrar*		
	inactive/ *notRenewed*		**inactive/** *notRenewed*		
Reception of a hold request from a Registrant	**ok**		**inactive/serverHold**		**Hold by Registrant is started**
Removal of hold by a Registrant	**inactive/serverHold**		**ok**		**Hold by Registrant is ended**
Reception of a hold request from a third party	**ok**		**inactive/***serverHold*		**Hold by third party is started**
Removal of hold by a third party	**inactive/***serverHold*		**ok**		**Hold by third party is ended**

Domain name is put in hold by the Registry	ok	inactive/*serverHold*	**Hold by server is started**
Removal of hold by the Registry	inactive/*serverHold*	ok	**Hold by server is ended**
Reception of a lock request from a Registrant	ok	*ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited*	**Lock by Registrant is started**
Removal of lock by a Registrant	*ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited*	ok	**Lock by Registrant is ended**
Reception of a lock request from a third party	ok	*ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited*	**Lock by third party is started**
Removal of lock by a third party	*ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited*	ok	**Lock by third party is ended**
Domain is put in lock by the Registry	ok	*ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited*	**Lock by server is started**
Removal of lock by the Registry	*ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited*	ok	**Lock by server is ended**
Reception of a Delete Domain	ok/*autoRenewPeriod*	pendingDelete/*redemptionPeriod*	**Refund renew for deleting domain in autoRenewPeriod**
	inactive/*dnsHold/autoRenewPeriod*		
Cancellation by the Registry	-/*autoRenewPeriod*	-	**Refund renew for deleting domain by Registry in autoRenewPeriod**
Revocation by the Registry	-/*autoRenewPeriod*	-	**Refund renew for revoking domain in autoRenewPeriod**
Reception of a Transfer Domain (op=approve) for Domain Transfer Expiry	pendingTransfer/*autoRenewPeriod*	ok	**Refund renew for transferring domain to a registrar in autoRenewPeriod**

pendingTransfer for Domain Transfer		**inactive**/*dnsHold*	
Reception of a Transfer Domain (op=approve) for Domain and Trade Transfer	**pendingTransfer**/*autoRenewPeriod*	**ok**	**Refund renew for transferring and trading domain to a registrar in autoRenewPeriod**
Expiry pendingTransfer for Domain and Trade Transfer		**inactive**/*dnsHold*	
Reception of a Transfer Domain (op=approve) for Domain and Trade Transfer	**ok**/*autoRenewPeriod*	**ok**	**Refund renew for transferring and trading domain to a registrar in autoRenewPeriod**
Expiry pendingTransfer for Domain and Trade Transfer			
Expiry of autoRenewPeriod during pendingTransfer	**pendingTransfer**/*autoRenewPeriod*	**pendingTransfer**	**Refund renew for autoRenewPeriod expired during pendingTransfer**
Reception of a Transfer Domain (op=reject) for Domain Transfer	**pendingTransfer**	**ok**	**Refund domain transfer to a registrar for rejecting transfer**
		inactive/*dnsHold*	
Reception of a Transfer Domain (op=reject) for Domain and Trade Transfer	**pendingTransfer**	**ok**	**Refund domain transfer and trade to a registrar for rejecting transfer**
		inactive/*dnsHold*	
Reception of a Transfer Domain (op=cancel) for Domain Transfer	**pendingTransfer**	**ok**	**Refund domain transfer to a registrar for cancelling transfer**
		inactive/*dnsHold*	
Reception of a Transfer Domain (op=cancel) for Domain and Trade Transfer	**pendingTransfer**	**ok**	**Refund domain transfer and trade to a registrar for cancelling transfer**
		inactive/*dnsHold*	

Successful end of a bulk transfer (one only message for all the domains transferred in auto renew period)		**ok**	**Refund renews for bulk transferring domains in autoRenewPeriod**
		inactive/dnsHold	
Reception of a Restore Domain for expired domain name in noRegistrar	**inactive/*noRegistrar***	**ok** *(if the domain name is not in auto renew period and has a valid DNS configuration)*	**Debit renew for restoring expired domain in inactive/noRegistrar**
		ok/*autoRenewPeriod* *(if the domain name is in auto renew period and has a valid DNS configuration)*	
		inactive/dnsHold *(if the domain name is not in auto renew period and does not have a valid DNS configuration)*	
		inactive/*dnsHold/autoRenewPeriod* *(if the domain name is in auto renew period and does not have a valid DNS configuration)*	
Reception of a Restore Domain for expired and cancelled domain name	**pendingDelete/*redemptionPeriod***	**ok** *(if the domain name is not in auto renew period and has a valid DNS configuration)*	**Debit renew for restoring expired domain in pendingDelete/redemptionPeriod**
		ok/*autoRenewPeriod* *(if the domain name is in auto renew period and has a valid DNS configuration)*	
		inactive/*dnsHold* *(if the domain name is not in auto renew period and does not have a valid DNS configuration)*	
		inactive/*dnsHold/autoRenewPeriod* *(if the domain name is in auto renew period and does not have a valid DNS configuration)*	

6.7.3   Correspondence between messages and XML Schema

Below is the correspondence between a message, XML Schema and type within the schema.

Message	XML Schema	Type
Password will expire soon	extepp-2.0.xsd	extepp:passwdReminder
Wrong namespace in Login Request	extepp-2.0.xsd	extepp:wrongNamespaceReminder

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Credit is under the threshold set by the Registrar	extepp-2.0.xsd	extepp:creditMsgData
Normal balance: all operations are allowed	extepp-2.0.xsd	extepp:creditMsgData
The Registrar is in low credit	extepp-2.0.xsd	extepp:creditMsgData
Out of funds: only not invoiced operations are allowed	extepp-2.0.xsd	extepp:creditMsgData
Requested IDN domain contains remapped chars	extdom-2.0.xsd	extdom: remappedIdnData
DNS check ended unsuccessfully	extdom-2.0.xsd	extdom:dnsErrorMsgData
DNS check ended successfully	extdom-2.0.xsd	extdom:chgStatusMsgData
DNS check ended successfully with warning	extdom-2.0.xsd	extdom:dnsWarningMsgData
pendingUpdate is started	extdom-2.0.xsd	extdom:chgStatusMsgData
pendingUpdate is expired	extdom-2.0.xsd	extdom:chgStatusMsgData
redemptionPeriod is started	extdom-2.0.xsd	extdom:chgStatusMsgData
redemptionPeriod is expired	extdom-2.0.xsd	extdom:chgStatusMsgData
pendingDelete is started	extdom-2.0.xsd	extdom:chgStatusMsgData
Domain has been deleted	extdom-2.0.xsd	extdom:simpleMsgData
Lost delegation	extdom-2.0.xsd	extdom: dlgMsgData
autoRenewPeriod is started	extdom-2.0.xsd	extdom:chgStatusMsgData
autoRenewPeriod is expired	extdom-2.0.xsd	extdom:chgStatusMsgData
Revoke is started	extdom-2.0.xsd	extdom:chgStatusMsgData
Revoke is expired	extdom-2.0.xsd	extdom:chgStatusMsgData
No Registrar is started	extdom-2.0.xsd	extdom:chgStatusMsgData
No Registrar is expired	extdom-2.0.xsd	extdom:chgStatusMsgData
Reassignation is expired	extdom-2.0.xsd	extdom:chgStatusMsgData
Not Renewed is started	extdom-2.0.xsd	extdom:chgStatusMsgData
Not Renewed is ended	extdom-2.0.xsd	extdom:chgStatusMsgData
Not Renewed is expired	extdom-2.0.xsd	extdom:chgStatusMsgData
Challenge procedure is started	extdom-2.0.xsd	extdom:chgStatusMsgData
Challenge procedure is ended	extdom-2.0.xsd	extdom:chgStatusMsgData
Hold by registrant is started	extdom-2.0.xsd	extdom:chgStatusMsgData
Hold by third party is started	extdom-2.0.xsd	extdom:chgStatusMsgData
Hold by server is started	extdom-2.0.xsd	extdom:chgStatusMsgData
Hold by registrant is ended	extdom-2.0.xsd	extdom:chgStatusMsgData
Hold by third party is ended	extdom-2.0.xsd	extdom:chgStatusMsgData
Hold by server is ended	extdom-2.0.xsd	extdom:chgStatusMsgData
Lock by registrant is started	extdom-2.0.xsd	extdom:chgStatusMsgData

Lock by third party is started	extdom-2.0.xsd	extdom:chgStatusMsgData
Lock by server is started	extdom-2.0.xsd	extdom:chgStatusMsgData
Lock by registrant is ended	extdom-2.0.xsd	extdom:chgStatusMsgData
Lock by third party is ended	extdom-2.0.xsd	extdom:chgStatusMsgData
Lock by server is ended	extdom-2.0.xsd	extdom:chgStatusMsgData
Domain transfer has been requested: pendingTransfer is started	domain-1.0.xsd	domain:trnData
Domain transfer has been rejected	domain-1.0.xsd	domain:trnData
Domain transfer has been cancelled	domain-1.0.xsd	domain:trnData
Domain transfer has been executed	domain-1.0.xsd	domain:trnData
Domain transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name.	domain-1.0.xsd	domain:trnData
Domain transfer is expired: transfer has been executed	domain-1.0.xsd	domain:trnData
Domain transfer is expired: transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name.	domain-1.0.xsd	domain:trnData
Domain and trade transfer has been requested: pendingTransfer is started	domain-1.0.xsd extdom-2.0.xsd	domain:trnData extdom:trade
Domain and trade transfer has been rejected	domain-1.0.xsd extdom-2.0.xsd	domain:trnData extdom:trade
Domain and trade transfer has been cancelled	domain-1.0.xsd extdom-2.0.xsd	domain:trnData extdom:trade
Domain and trade transfer has been executed	domain-1.0.xsd extdom-2.0.xsd	domain:trnData extdom:trade
Domain and trade transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name.	domain-1.0.xsd extdom-2.0.xsd	domain:trnData extdom:trade
Domain and trade transfer is expired: transfer has been executed	domain-1.0.xsd extdom-2.0.xsd	domain:trnData extdom:trade
Domain and trade transfer is expired: transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name.	domain-1.0.xsd extdom-2.0.xsd	domain:trnData extdom:trade
Refund renew for deleting domain in autoRenewPeriod	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData
Refund renew for transferring domain to a registrar in autoRenewPeriod	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData
Refund renew for transferring and trading domain to a registrar in autoRenewPeriod	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData
Refund renew for autoRenewPeriod expired during pendingTransfer	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData

Refund domain transfer to a registrar for rejecting transfer	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData
Refund domain transfer and trade to a registrar for rejecting transfer	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData
Refund domain transfer to a registrar for cancelling transfer	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData
Refund domain transfer and trade to a registrar for cancelling transfer	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData
Refund renew for revoking domain in autoRenewPeriod	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData
Refund renew for deleting domain by Registry in autoRenewPeriod	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData
Refund renews for bulk transferring domains in autoRenewPeriod	extdom-2.0.xsd	extdom: refundRenewsForBulkTransferMs gData
Debit renew for restoring expired domain in inactive/noRegistrar	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData
Debit renew for restoring expired domain in pendingDelete/redemptionPeriod	extdom-2.0.xsd	extdom:delayedDebitAndRefund MsgData

6.8 Emails to the Registrant

The EPP server sends an email directly to the Registrant in the following cases:

- Registration of a domain name completed successfully

- Change of Registrant completed successfully (the mail is sent to both the old and the new Registrant)

- Change of the Registrar with the simultaneous change of the Registrant completed successfully (the mail is sent to both the old and the new Registrant)

- Change of the domain name to "noRegistrar" status

6.9 Return codes and reasons for errors

To be able to interact efficiently with the EPP server, it is necessary that the Registrar is aware of the return codes of the standard EPP and the reasons for rejection, which further specify return codes and relate to the EPP server.
The return codes are set out in Appendix C and the reasons in Appendix D.

6.10 Format of dates

For the "Date" fields of the contact and domain objects, the EPP protocol provides two formats:

- one that expresses the date in CUT (Coordinated Universal Time);

- one that expresses the local date by adding the difference in hours (offset), positive or negative, compared to the CUT.

The implementation of the Registry's synchronous system uses the second format:

<div align="center">yyyy-mm-dd 'T' hh:mm:ss+<offset></div>

where <offset> may take the following values:
- +01:00 - when DST is not applied

- +02:00 - when DST is applied

Example: 2008-07-07T15:13:18+02:00

6.11 Other useful parameters

The following table shows other parameters that may be useful for clients when interacting with the Registry's synchronous server.

Name	Meaning	Value
MIN_IP	Minimum number of IP addresses for each name server subordinate to the domain name (one Ipv4 address)	1
MAX_IP	Maximum number of IP addresses for each name server subordinate to the domain name (one Ipv4 address and one Ipv6 address)	2
MIN_NS	Minimum number of name servers for each domain name	2
MAX_NS	Maximum number of name servers for each domain name	6
MAX_DS_IN_CREATE	Maximum number of DS records for each domain name after a Create Domain	1
MAX_DS_IN_UPDATE	Maximum number of DS records for each domain name after an Update Domain	2
MIN_CONTACT_TECH	Minimum number of tech contacts for each domain name	1
MAX_CONTACT_TECH	Maximum number of tech contacts for each domain name	6
MIN_CONTACT_ADMIN	Minimum number of admin contacts for each domain name	1
MAX_CONTACT_ADMIN	Maximum number of admin contacts for each domain name	1
MAX_CMD	Maximum number of Check Domain commands for Registrar that can be sent daily to the epp.nic.it server	20000
	Maximum number of Check Domain commands for Registrar that can be sent daily to the epp-deleted.nic.it server Maximum number of Create Domain commands for Registrar that can be sent daily to the epp-deleted.nic.it server	3000
MAX_CHECK	Maximum number of referred domain names/contacts for each Check Domain/Check contact command	5
MIN_PWAUTHINFO_LENGTH	Minimum lenght of the AuthInfo associated to the domain name	8
MAX_PWAUTHINFO_LENGTH	Maximum lenght of the AuthInfo associated to the domain name	32
MIN_PWUSER_LENGTH	Minimum lenght of the user password	6
MAX_PWUSER_LENGTH	Maximum lenght of the user password	16

USER_SESSIONS_LIMIT	Maximum number of contemporary active sessions for each Registrar	5
USER_CONNECTIONS_LIMIT	Maximum number of TCP connections simultaneously opened per IP address	3
USER_SESSION_TIMEOUT	Session timeout in minutes	5
USER_IP_ADDRESSES	Maximum number of static IP addresses of clients per Registrar	5

7   Appendix B - Commands for managing the work session

Before starting a working session with the Registry's EPP server, the Registrar must have requested the following information:

- EPP server address;
- name for login (`<clID>`);
- password to be used in the login (`<pw>`).

The Registrar must notify the Registry of the physical address of the machines that will host the Registrar's EPP clients.

A normal dialog between a client and the Registry's EPP server has the following sequence of actions:

- The client connects to the server via a secure SSL connection via HTTPS
- The server responds by identifying itself and presenting the commands and extensions that it supports
- The client logs in specifying name and password,
- The client periodically queries its polling queue to check and collect any messages from the server
- The client sends commands to the server, which responds immediately
- The client ends the session

Consequently, in addition to commands for querying and managing contacts (see Section 4.1) and domains (see Section 4.2), there are also commands for managing the connection and the polling queue (see Sections 4.3 and 6.7).

The EPP protocol provides three commands to manage a work session:

- login
- logout
- hello

7.1   Login

The *login* command is used by the client to start a working session with the EPP server. The following table displays the fields in the request for login:

Field	Description	XML Tag	XML Attribute Tag	Cardinality	Length	Notes
Registrar's ID	Unambiguous Registrar identifier	clID		1	1-16	Alphanumeric value given by Registry to Registrar
Password	Registrar's authentication password	pw		1	6-16	Alphanumeric value defined by Registrar
New Password	New authentication password of Registrar	newPW		0-1	6-16	Alphanumeric value defined by Registrar to change his own password
Server version	Currently active server version	version		1		Current server version is "1.0"
Language	Language chosen for server to client messages	lang		1		Allowed values: en (default), it
Objects namespace URI	URI of the namespaces of the standard EPP protocol that represent the objects that will be dealt with in the session	objURI		2		Allowed namespaces: contact-1.0 domain-1.0
Extension namespace URI	URI of the namespaces of the EPP protocol extensions	extURI		4		Allowed namespaces: extepp-2.0 extcon-1.0 extdom-2.0 rgp-1.0

The response to the *login* contains the Registrar's available credit. This extension is not available for the version of the EPP server used for the accreditation test.

7.1.1 Examples of *login* requests from a "non DNSSEC accredited" Registrar

Example 1

Example of *login* request from a "non DNSSEC accredited" Registrar:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
<command>
<login>
    <clID>DEMO-REGISTRAR</clID>
    <pw>14nov07</pw>
    <options>
      <version>1.0</version>
      <lang>en</lang>
    </options>
    <svcs>
      <objURI>urn:ietf:params:xml:ns:contact-1.0</objURI>
      <objURI>urn:ietf:params:xml:ns:domain-1.0</objURI>
      <svcExtension>
          <extURI>http://www.nic.it/ITNIC-EPP/extepp-2.0</extURI>
```

```
            <extURI>http://www.nic.it/ITNIC-EPP/extcon-1.0</extURI>
            <extURI>http://www.nic.it/ITNIC-EPP/extdom-2.0</extURI>
            <extURI>urn:ietf:params:xml:ns:rgp-1.0</extURI>
        </svcExtension>
      </svcs>
</login>
</command>
</epp>
```

Example 2
Example of *login* request with password change from a "non DNSSEC accredited" Registrar:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
<command>
<login>
    <clID>DEMO-REGISTRAR</clID>
    <pw>14nov07</pw>
    <newPW>14mar64</newPW>
    <options>
        <version>1.0</version>
        <lang>en</lang>
    </options>
    <svcs>
        <objURI>urn:ietf:params:xml:ns:contact-1.0</objURI>
        <objURI>urn:ietf:params:xml:ns:domain-1.0</objURI>
        <svcExtension>
            <extURI>http://www.nic.it/ITNIC-EPP/extepp-2.0</extURI>
            <extURI>http://www.nic.it/ITNIC-EPP/extcon-1.0</extURI>
            <extURI>http://www.nic.it/ITNIC-EPP/extdom-2.0</extURI>
            <extURI>urn:ietf:params:xml:ns:rgp-1.0</extURI>
        </svcExtension>
    </svcs>
</login>
</command>
</epp>
```

7.1.2 Example of *login* request from a "DNSSEC accredited" Registrar

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
<command>
  <login>
    <clID>DEMO-REG</clID>
    <pw>14nov07</pw>
    <options>
      <version>1.0</version>
      <lang>en</lang>
    </options>
    <svcs>
      <objURI>urn:ietf:params:xml:ns:contact-1.0</objURI>
      <objURI>urn:ietf:params:xml:ns:domain-1.0</objURI>
      <svcExtension>
        <extURI>http://www.nic.it/ITNIC-EPP/extepp-2.0</extURI>
        <extURI>http://www.nic.it/ITNIC-EPP/extcon-1.0</extURI>
        <extURI>http://www.nic.it/ITNIC-EPP/extdom-2.0</extURI>
        <extURI>urn:ietf:params:xml:ns:rgp-1.0</extURI>
        <extURI>urn:ietf:params:xml:ns:secDNS-1.1</extURI>
        <extURI>http://www.nic.it/ITNIC-EPP/extsecDNS-1.0</extURI>
```

```
        </svcExtension>
      </svcs>
    </login>
  </command>
</epp>
```

7.1.3 Examples of responses to a *login* request from a "non DNSSEC accredited" Registrar

Example 1

Response to a *login* request with charge of operations not activated:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <trID>
      <svTRID>cfec00d5-5a14-4ee0-b3ca-4e2339bc6119</svTRID>
    </trID>
  </response>
 </epp>
```

Example 2

Response to a *login* request with charge of operations activated:

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <extension>
      <extepp:creditMsgData>
        <extepp:credit>48739.112</extepp:credit>
      </extepp:creditMsgData>
    </extension>
    <trID>
      <svTRID>898b1da3-e544-4c47-9251-6f621d4ae37a</svTRID>
    </trID>
   </response>
  </epp>
```

7.1.4 Example of response to a *login* request from a "DNSSEC accredited" Registrar

In the case that the *login* request is sent by a "DNSSEC accredited" Registrar who, in the request,

has indicated the two namespaces related to the DNSSEC exstensions, the response contains the following header:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp
 xmlns="urn:ietf:params:xml:ns:epp-1.0"
 xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
 xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
 xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
 xmlns:secDNS="urn:ietf:params:xml:ns:secDNS-1.1"
 xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
 xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
 xmlns:extsecDNS="http://www.nic.it/ITNIC-EPP/extsecDNS-1.0"
 xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0">
```

7.2   Logout

The logout command is used by client to end a work session with the EPP server. The server, upon expiry of the timeout, may close a session opened with a client after persistent inactivity.

7.2.1   Logout request

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
 <command>
     <logout/>
 </command>
</epp>
```

7.3   Hello

The *hello* command is used for two different purposes and can be sent:

- before a login to query an EPP server on the services implemented and the objects manipulated by the EPP commands;

- during a working session to keep the session active and prevent the client from being disconnected due to timeout.

The hello command provides a single empty `<hello>`.
The server responds to a hello request with a `<greeting>` which contains all the information needed to start a working session:

- name of the server;

- current date of the server;

- current version of the server;

- languages;

- URI of the namespace of the EPP objects that can be manipulated;

- URI of the namespace of any extensions;

- a section, expressed by `<dcp>` (data collection policy), which lists the security policies implemented by the server for access and data management.

7.3.1   Hello request

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
```

```
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <hello/>
</epp>
```

7.3.2 Greeting response of Registry's EPP server

```
<?xml version="1.0" encoding="UTF-8" ?>
<epp
  xmlns:contact="urn:ietf:params:xml:ns:contact-1.0"
  xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
  xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-2.0"
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-2.0"
  xmlns:extcon="http://www.nic.it/ITNIC-EPP/extcon-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <greeting>
    <svID>NIC-IT EPP Registry</svID>
    <svDate>2013-02-22</svDate>
    <svcMenu>
      <version>1.0</version>
      <lang>en</lang>
      <lang>it</lang>
      <objURI>urn:ietf:params:xml:ns:contact-1.0</objURI>
      <objURI>urn:ietf:params:xml:ns:domain-1.0</objURI>
      <svcExtension>
        <extURI>http://www.nic.it/ITNIC-EPP/extepp-2.0</extURI>
        <extURI>http://www.nic.it/ITNIC-EPP/extcon-1.0</extURI>
        <extURI>http://www.nic.it/ITNIC-EPP/extdom-2.0</extURI>
        <extURI>urn:ietf:params:xml:ns:rgp-1.0</extURI>
      </svcExtension>
    </svcMenu>
  <dcp>
   <access>
      <all ns9:type="ns10:string"
 xmlns:ns9="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:ns10="http://www.w3.org/2001/XMLSchema"/>
   </access>
   <statement>
     <purpose>
        <admin ns9:type="ns10:string"
      xmlns:ns9="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:ns10="http://www.w3.org/2001/XMLSchema"/>
      <prov ns9:type="ns10:string"
      xmlns:ns9="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:ns10="http://www.w3.org/2001/XMLSchema"/>
     </purpose>
    <recipient>
     <ours>
     </ours>
     <public ns9:type="ns10:string"
 xmlns:ns9="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:ns10="http://www.w3.org/2001/XMLSchema"/>
    </recipient>
    <retention>
      <stated ns9:type="ns10:string"
      xmlns:ns9="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:ns10="http://www.w3.org/2001/XMLSchema"/>
    </retention>
   </statement>
  </dcp>
```

```
</greeting>
</epp>
```

8   Appendix C - Return codes

Below are the return codes submitted by the client to the EPP server that are adopted by the Registry's synchronous server. The codes and meanings are established by the EPP standard.

```
1000=Command completed successfully
Response to a command completed successfully.

1001=Command completed successfully; action pending
Response to a command completed successfully and notification that a
consequent action must be carried out asynchronously by the server.
Example: response to the command Create Domain, which creates the domain
and puts it in dnsHold awaiting the successful DNS configuration.
The same response occurs when the configuration of the name servers
associated with a domain is changed by the command Update Domain (wait
for the outcome of the control of the new DNS configuration).

1300=Command completed successfully; no messages
Response to a command Poll(with op=Request) completed successfully and
notification that the polling queue contains NO messages.

1301=Command completed successfully; ack to dequeue
Response to a command Poll(with op=Request) completed successfully and
notification that the polling queue contains at least one message.

1500=Command completed successfully; ending session
Response to a command Logout completed successfully.

2001=Command syntax error
Response to a command whose execution fails because a parameter (or a
value of a parameter) inserted it the command is incorrect.
The same response occurs when the command is unknown to the server (i.e.
it does NOT belong to the version of the EPP protocol implemented by the
server).

2002=Command use error
Response to a command whose execution fails due to errors regarding the
context and/or sequence of the commands.
Example: issue of any command when the session is not active or when the
session is terminated, perform Login or Logout twice in succession or
log out without first logging in.

2003=Required parameter missing
Response to a command whose execution fails because the required
parameter is missing

2004=Parameter value range error
Response to a command whose execution fails because a "parameter" (a
value of an xml) element in the command is not in the value range
allowed.

2005=Parameter value syntax error
Response to a command whose execution fails because a "parameter" (a
value of an xml) element in the command contains a syntax error.
Example: response to a Create Contact with an ID contact containing
characters not permitted.
```

```
2100=Unimplemented protocol version
Response to a Login command whose execution fails because a protocol
version has been declared which is different from the one shown by the
server.

2101=Unimplemented command
Response to a command whose execution fails because NOT implemented by
the server.
Example: response to a Domain Renew.

2102=Unimplemented option
Response to a command whose execution fails because it uses an option
(op) NOT implemented by the server.

2103=Unimplemented extension
Response to a command whose execution fails because it uses an extension
NOT implemented by the server.

2104=Billing failure
Response to a command whose execution fails because it is NOT allowed by
the Registrar's credit situation.

2106=Object is not eligible for transfer
Response to a Domain Transfer command (op:Request) whose execution fails
because transfer for that domain is NOT allowed.

2200=Authentication error
Response to a command (typically Login) whose execution fails because
the credentials supplied are NOT valid

2201=Authorization error
Response to a command whose execution fails because AuthInfo has not
been supplied.

2202=Invalid authorization information
Response to a command whose execution fails because the AuthInfo
supplied does NOT coincide with that associated with the domain.

2300=Object pending transfer
Response to a command whose execution fails because the domain is
pending transfer.

2301=Object not pending transfer
Response to a command whose execution fails because the domain is NOT
pending transfer.

2302=Object exists
Response to a creation command whose execution fails because the object
already exists.
Example: the Create Contact of a contact already exists.

2303=Object does not exist
Response to a command whose execution fails because the object does NOT
exist.

2304=Object status prohibits operation
Response to a command whose execution fails because of the current
status of the object.

2305=Object association prohibits operation
```

```
Response to a command whose execution fails due to the associations that
the object has with the other objects.
Example: attempt to delete a contact that is associated with one or more
domains.

2306=Parameter value policy error
Response to a command whose execution fails due to the value of a
parameter specified in the request that does NOT conform to system
policy.

2308=Data management policy violation
Response to a command whose execution fails due to one or more
parameters in the request which would violate the system's policies of
data management.
Example: attempt to create a domain with a number of name servers that
is lower than the minimum defined by the system policy.

2400=Command failed
Response to a command whose execution fails without termination of
current session.

2500=Command failed; server ending session
Response to a command whose execution fails with termination of current
session.

2502=Session limit exceeded; server closing connection
Response to a command whose execution fails because the maximum limit of
simultaneous sessions per Registrar has been reached.
```

9   Appendix D - Reasons for errors

Below are the reasons used by the synchronous server of the Italian Registry detailing further the
return codes reported in the previous section, numbered from 1000 to 2502.
The reasons are divided up by category:

- Reasons >= 4000 : generic errors

- Reasons >= 5000 : session errors

- Reasons >= 6000 : accounting errors

- Reasons >= 7000 : errors regarding the DNS configuration proposed in the Create Domain
  and Update Domain commands

- Reasons >= 8000 : Contact object errors

- Reasons >= 9000 : Domain object errors

- Reasons >= 10000 : errors regarding the DNSSEC

The meaning of each reason is established by the Italian Registry and can be subject to change.

```
(2001=Command syntax error 4003=<The syntax error message coming from
the XML parser>):
Response to any command whose execution fails because it is NOT
syntactically correct.

(2002=Command use error 4004=Command has been already executed
successfully in the accreditation test. This error does not affect the
test result):
Response to any command submitted to the accreditation server whose
execution fails because command has been already executed successfully
```

in the accreditation test.

(2002=Command use error 4005=Unexpected command in accreditation test):
Response to any command submitted to the accreditation server whose execution fails because it is unexpected in the accreditation test.

(2002=Command use error 4006=Unexpected command in accreditation test – Test completed):
Response to any command submitted to the accreditation server whose execution fails because the test has been completed.

(2002=Command use error 4007=Command is prohibited on this server):
Response to a command Update/Delete/Transfer Domain whose execution fails because it has been submitted to the server dedicated to the registration of domain names deleted less than 7 days ago.

(2002=Command use error 4014=Login request was sent on a session already opened):
Response to a Login command whose execution fails because the command report a session ID associated with an opened session.

(2002=Command use error 4015=First request on a new session was not Login):
Response to any command, except Login and Hello, whose execution fails because the command has not been submitted on an opened session.

(2002=Command use error 5058=The Registrar is suspended):
Response to a create domain, transfer domain, transfer-trade domain or update domain for the change of Registrant command whose execution fails because the command has been sent by a suspended Registrar.

(2003=Required parameter missing 4011=Object URI missing):
Response to a Login command whose execution fails because an URI of a required EPP object is missing.

(2003=Required parameter missing 4012=Extension URI missing):
Response to a Login command whose execution fails because an URI of a required extension is missing or, in the case of a "DNSSEC accredited" Registrar who has indicated only one between the following namespaces:
- urn:ietf:params:xml:ns:secDNS-1.1;
- http://www.nic.it/ITNIC-EPP/extsecDNS-1.0.

(2003=Required parameter missing 5001=Message ID missing):
Response to a command Poll (with op=Ack) whose execution fails because the command does NOT contain the ID message of the message to confirm.

(2003=Required parameter missing 5005=Message refers to a namespace URI missing in Login request):
Response to a Poll (with op=Req) command whose execution fails because the Registrar has not indicated, in the EPP Login request, a namespace related to an exstension which is in the message.

(2003=Required parameter missing 8004=There is nothing to update):
Response to a command Update Contact whose execution fails because the <chg> parameter has NOT been specified or filled.

(2003=Required parameter missing 8019=Email address missing):
Response to a command Create Contact whose execution fails because the contact's email is missing.

(2003=Required parameter missing 8020=Consent for publishing missing):
Response to a command Create Contact whose execution fails because ConsentForPublishing has not been specified.

(2003=Required parameter missing 8022=Voice number missing):
Response to a command Create/Update Contact whose execution fails because <contact:voice> is missing or empty.

(2003=Required parameter missing 8023=Registrant: entity type missing):
Response to a command Create/Update Contact whose execution fails because <extcon:entityType> is missing or empty.

(2003=Required parameter missing 8025=Registrant: nationality code missing):
Response to a command Create/Update Contact whose execution fails because <extcon:nationalityCode> is missing.

(2003=Required parameter missing 8026=Registrant: reg code missing):
Response to a command Create/Update Contact whose execution fails because <extcon:regCode> is missing or empty.

(2003=Required parameter missing 8032=Postal information missing):
Response to a command Create Contact whose execution fails because <contact:PostalInfo> is missing.

(2003=Required parameter missing 8034=Postal information: name missing):
Response to a command Create/Update Contact whose execution fails because NO name has been specified in <contact:name>.

(2003=Required parameter missing 8035=Postal information: org missing):
Response to a command Create/Update Contact whose execution fails because <contact:org> is missing or empty.
NB: The org field is only mandatory if the contact is a Registrant with EntityType<>1.

(2003=Required parameter missing 8036=Postal information: addr missing):
Response to a command Create/Update Contact whose execution fails because <contact:addr> is missing or empty.

(2003=Required parameter missing 8037=Postal information: street missing):
Response to a command Create/Update Contact whose execution fails because <contact:street> is missing or empty.

(2003=Required parameter missing 8039=Postal information: city missing):
Response to a command Create/Update Contact whose execution fails because <contact:city> is empty.

(2003=Required parameter missing 8040=Postal information: sp missing):
Response to a command Create/Update Contact whose execution fails because <contact:sp> is missing or empty.

(2003=Required parameter missing 8041=Postal information: pc missing):
Response to a command Create/Update Contact whose execution fails because <contact:pc> is missing or empty.

(2003=Required parameter missing 8042=Postal information: cc missing):
Response to a command Create/Update Contact whose execution fails because <contact:cc> is missing or empty.

(2003=Required parameter missing 8061=Contact: add element is empty):
Response to a command Update Contact whose execution fails because <add>
does NOT contain anything to add (is empty).

(2003=Required parameter missing 8062=Contact: rem element is empty):
Response to a command Update Contact whose execution fails because <rem>
does NOT contain anything to remove (is empty).

(2003=Required parameter missing 8064=Contact: chg element is empty):
Response to a command Update Contact whose execution fails because <chg>
does NOT contain anything to change (is empty).

(2003=Required parameter missing 9016=Registrant missing):
Response to a command Create/Update Domain whose execution fails because
<domain:registrant> has not been specified or is empty.

(2003=Required parameter missing 9019=There is nothing to update):
Response to a command Update Domain whose execution fails because <add>,
<rem> or <chg> are missing and there is thus nothing to update.

(2003=Required parameter missing 9038=Domain: add element is empty):
Response to a command Update Domain whose execution fails because <add>
does NOT contain anything to add (is empty).

(2003=Required parameter missing 9039=Domain: rem element is empty):
Response to a command Update Domain whose execution fails because <rem>
does NOT contain anything to remove (is empty).

(2003=Required parameter missing 9040=Domain: chg element is empty):
Response to a command Update Domain whose execution fails because <chg>
does NOT contain anything to change (is empty).

(2003=Required parameter missing 9068=Authorization information missing
in update domain):
Response to an Update Domain command of a domain name that requires a
modification of the Registrant whose execution fails because the new
authInfo is missing, or a simple modification that only involves a
change of authInfo.

(2004=Parameter value range error 4002=Invalid values):
An element in a XML request has an invalid value.

(2004=Parameter value range error 5053=Property is mandatory):
An element in a XML request is a mandatory property.

(2004=Parameter value range error 7004=Host does not exist):
A name server reported in a XML request does not exist.

(2004=Parameter value range error 8012=Status to add has not "client"
prefix):
Response to a command Update Contact for the addition of a status whose
execution fails because the status to add does NOT have the prefix
"client".
NB: only if the status to add is one of the valid ones
(serverDeleteProhibited, ok, linked, etc.).

(2004=Parameter value range error 8013=Status to remove has not "client"
prefix):
Response to a command Update Contact to remove a status whose execution
fails because the status to remove does NOT have the "client".

NB: only if the status to remove is one of the valid ones (serverDeleteProhibited, ok, linked, etc.).

(2004=Parameter value range error 8021=Too many contact identifiers): Response to a command Check Contact whose execution fails because the number of contacts specified in the command is higher than the maximum specified by system policy.

(2004=Parameter value range error 8024=Registrant: invalid entity type): Response to a command Create/Update Contact whose execution fails because <extcon:entityType> contains an invalid value (out of range [1,..,7]).

(2004=Parameter value range error 8027=Registrant: invalid reg code): Response to a command Create/Update Contact whose execution fails because <extcon: regCode> contains an invalid value.

(2004=Parameter value range error 8046=Email cannot be changed with an empty value): Response to a command Update Contact whose execution fails because <contact:email> is empty.

(2004=Parameter value range error 8047=Voice cannot be changed with an empty value): Response to a command Update Contact whose execution fails because <contact:voice> is empty.

(2004=Parameter value range error 8048=Postal information: invalid cc value): Response to a command Create/Update Contact whose execution fails because <contact:cc> contains a country code (of 2 characters) that does NOT exist.

(2004=Parameter value range error 8049=Postal information: invalid sp value): Response to a command Create/Update Contact whose execution fails because <contact:sp> contains an invalid value.

(2004=Parameter value range error 8050=Registrant: invalid nationality code): Response to a command Create/Update Contact whose execution fails because <registrant:nationalityCode> a country code (of 2 characters) that does NOT exist.

(2004=Parameter value range error 8051=Registrant: nationality code is not allowed): Response to a command Create/Update Contact whose execution fails because <registrant:nationalityCode> a country code (of 2 characters) that is NOT valid for the Registrant.

(2004=Parameter value range error 8059=Contact status is not implemented by the server): Response to a command Update Contact whose execution fails because <contact:status> in the add section contains a status that is not implemented by the server.

(2004=Parameter value range error 8064=Registrant: entity type is not compatible with nationality code): Response to a command Create/Update Contact whose execution fails because the value of <registrant:entityType> is not compatible with the

value of <registrant:nationalityCode>.

(2004=Parameter value range error 8065=Postal information: invalid pc value):
Response to a command Create/Update Contact whose execution fails because the value of element <contact:pc> is not valid.

(2004=Parameter value range error 9003=Contact does not exist):
Response to a command Create Domain whose execution fails because one or more contacts in the command do NOT exist.

(2004=Parameter value range error 9030=Status to add has not "client" prefix):
Response to a command Update Domain to add a status whose execution fails because the status to add does NOT have the "client" prefix.
NB: to have such a response, the status must in any case be one of those existing in the system: serverDeleteProhibited, inactive, etc.

(2004=Parameter value range error 9031=Status to remove has not "client" prefix):
Response to a command Update Domain to remove a status whose execution fails because the status to remove does NOT have the "client" prefix.
NB: to have such a response, the status must in any case be one of those existing in the system: serverDeleteProhibited, inactive, etc.

(2004=Parameter value range error 9049=Invalid length of authInfo element):
Response to a command whose execution fails because the length of the password of authInfo specified is greater than the maximum length specified by the system policy.

(2004=Parameter value range error 9050=Too many domain names):
Response to a command Check Domain whose execution fails because the number of domain names specified in the command is greater than the maximum specified by the system policy.

(2004=Parameter value range error 9067=New authorization information is current authorization information):
Response to a command Update Domain of a domain name that requests the modification of the Registrant whose execution fails because the new authInfo is the same as the current authorization.

(2004=Parameter value range error 9073=Domain status is not implemented by the server):
Response to a command Update Domain whose execution fails because <domain:status> in the add section contains a status not implemented by the server.

(2005=Parameter value syntax error 7001=Host name syntax error):
Response to a command Create/Update Domain whose execution fails because one or more hostnames in the command are NOT syntactically correct.

(2005=Parameter value syntax error 7003=IP address syntax error):
Response to a command Create/Update Domain whose execution fails because one or more IP addresses in the command are NOT syntactically correct.

(2005=Parameter value syntax error 8001=Contact ID syntax error):
Response to a command Create Contact whose execution fails because the contact ID specified in the command is NOT syntactically correct.

(2005=Parameter value syntax error 8018=Email address syntax error):
Response to a command Create/Update Contact whose execution fails because the Email specified is NOT syntactically correct.

(2005=Parameter value syntax error 8053=Voice number syntax error):
Response to a command Create/Update Contact whose execution fails because <contact:voice> specified is NOT syntactically correct.

(2005=Parameter value syntax error 8054=Fax number syntax error):
Response to a command Create/Update Contact whose execution fails because <contact:fax> specified is NOT syntactically correct.

(2005=Parameter value syntax error 8066=Voice extension syntax error):
Response to a command Create/Update Contact whose execution fails because the attribute x of <contact:voice> specified is NOT syntactically correct.

(2005=Parameter value syntax error 8067=Fax extension syntax error):
Response to a command Create/Update Contact whose execution fails because the attribute x of <contact:fax> specified is NOT syntactically correct.

(2005=Parameter value syntax error 8070=Postal information: invalid org value):
Response to a command Create/Update Contact whose execution fails because <contact:org> contains an invalid value.

(2005=Parameter value syntax error 9007=Domain name syntax error):
Response to a command to create a domain name whose execution fails because the domain name is NOT syntactically correct.

(2102=Unimplemented option 4008=Unsupported language):
Response to a Login command whose execution fails because the value of <lang> element is unsupported.

(2102=Unimplemented option 4009=Unsupported object URI):
Response to a Login command whose execution fails because the value of <objURI> element is unsupported.

(2102=Unimplemented option 4010=Unsupported extension URI):
Response to a Login command whose execution fails because the value of <extURI> element is unsupported.

(2102=Unimplemented option 9020=Unsupported transfer option):
Response to a command Domain Transfer whose execution fails because the option requested does NOT exist.

(2102=Unimplemented option 9086=Unsupported hostObj option):
Response to a command Domain Create whose execution fails because the hostObj option is NOT supported.

(2102=Unimplemented option 9087=Unsupported report option):
Response to a command Domain Update whose execution fails because the report option of rgp:update extension is NOT supported.

(2102=Unimplemented option 10002=DNSSEC: unsupported maxSigLife element):
Response to a Create/Update Domain command, from a "DNSSEC accredited" Registrar, whose execution fails because within the <secDNS:create> or <secDNS:update> element there is <secDNS:maxSigLife>.

(2102=Unimplemented option 10003=DNSSEC: unsupported keyData element):
Response to a Create/Update Domain command, from a "DNSSEC accredited"
Registrar, whose execution fails because within the <secDNS:create> or
<secDNS:update> element there is a <secDNS:keyData> element in place of
or within <secDNS:dsData>.

(2102=Unimplemented option 10004=DNSSEC: unsupported urgent attribute):
Response to an Update Domain command, from a "DNSSEC accredited"
Registrar, whose execution fails because within the <secDNS:update>
element there is the *urgent* attribute.

Unused (2104=Billing failure 5054=Low credit: only auto renew and
unbillable commands will be processed):
Response to a command (for a payment) whose execution fails because the
residual credit of the Registrar is too low; it is only enough to renew
the domain names maintained.

(2104=Billing failure 5055=Out of funds):
Response to a command (for a payment) whose execution fails because the
Registrar is out of funds.

Unused (2104=Billing failure 5056=Credit is going below threshold limit
due to the operation cost):
Response to a command (for a payment) whose execution fails because the
residual credit, due to the operation cost, will go under the low credit
threshold.

(2106=Object is not eligible for transfer 9018=Destination client of the
transfer operation is the domain name sponsoring client):
Response to a command Transfer Domain (with op:Request) whose execution
fails because it has been submitted by the same Registrar who owns the
domain name.

(2200=Authentication error 6002=Object does not exist):
Response to a Login command whose execution fails because the Registrar
does not exist.

(2200=Authentication error 6003=Account expired):
Response to a Login command whose execution fails because the account is
expired.

(2200=Authentication error 6004=Password expired):
Response to a Login command whose execution fails because the password
is expired.

(2200=Authentication error 6005=Invalid username or password):
Response to a command Login whose execution fails because the username
and/or password are incorrect.

(2200=Authentication error 6007=Account disabled):
Response to a command Login whose execution fails because the account
has been disabled.

(2200=Authentication error 6008=Invalid new password):
Response to a Login command whose execution fails because the new
password is not valid.

(2201=Authorization error 6001=Lack of permissions to process command):
Response to an Info Contact, Delete Contact or Update Contact command

whose execution fails because the contact requested in the command does NOT belong to the current Registrar.

(2201=Authorization error 6009=Lack of permissions to process command or object does not exist):
Response to a Delete Domain or Update Domain command whose execution fails because the domain name specified in the command does not belong to the current Registrar.

(2201=Authorization error 9051=Lack of permissions to view status of domain transfer request):
Response to a command Transfer Domain (with op=query) whose execution fails because the Registrar is NOT permitted to see the progress status of the transfer.

(2201=Authorization error 9053=Lack of permissions to cancel domain transfer request):
Response to a command Transfer Domain (op=cancel) whose execution fails because the Registrar is NOT permitted to cancel the transfer.

(2201=Authorization error 9071=Lack of permissions to approve domain transfer request):
Response to a command Transfer Domain (op=approve) whose execution fails because the Registrar is NOT permitted to approve the transfer.

(2201=Authorization error 9072=Lack of permissions to reject domain transfer request):
Response to a command Transfer Domain (op=reject) whose execution fails because the Registrar is NOT permitted to reject the transfer.

(2202=Invalid authorization information 9001=Authorization information missing):
Response to a command whose execution fails due to missing AuthInfo associated to the object referred to in the command.
Example: execution of the command Info Domain on a domain name that belongs to another Registrar without specifying the AuthInfo.

(2202=Invalid authorization information 9085=Invalid domain authorization information or domain does not exist):
Response to an Info Domain or Transfer Query Domain command whose execution fails due to the lack of correspondence between the AuthInfo associated with the domain name and the one inserted in the command.
Es: execution of the Info Domain command on a domain name that belongs to another Registrar specifying an incorrect AuthInfo or without specifying it.

(2301=Object not pending transfer 9054=Domain transfer not pending):
Response to a command Transfer Domain (op=query) whose execution fails because the domain name specified in the query has NEVER been involved in a transfer.

(2302=Object exists 8058=Contact already exists):
Response to a command Create Contact whose execution fails because the contact specified already exists.

Unused (2302=Object exists 8068=Contact is registered in the asynchronous system):
Response to a command Info Contact whose execution fails because the contact is registered in the asynchronous system.

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(2302=Object exists 9042=Domain is registered):
Response to a command Create Domain whose execution fails because the
domain name is registered. This reason is used also in the Check Domain
response when the domain name is not available.

Unused (2302=Object exists 9082=Domain is in pending create status in
the asynchronous system):
Response to a command Create Domain whose execution fails because the
domain name is in pending create in the asynchronous system. This reason
is used also in the Check Domain response when the domain name is not
available.

Unused (2302=Object exists 9084=Domain is registered in the asynchronous
system):
Response to a command Transfer or Info Domain whose execution fails
because the domain name is in pending create in the asynchronous system.

(2303=Object does not exist 5004=There are no messages in the queue):
Response to a command Poll (with op=Ack) whose execution fails because
the queue does not contain any messages to confirm.

(2303=Object does not exists 9003=Contact does not exist):
Response to a command Info Contact whose execution fails because the
contact in the command does NOT exist.

(2302=Object does not exist 9021=Domain is reserved):
Response to a command Create Domain whose execution fails because the
domain name is reserved. This reason is used also in the Check Domain
response when domain name is not available.

(2303=Object does not exist 9043=Domain is unassignable):
Response to a command Create Domain whose execution fails because the
domain name CANNOT be assigned. This reason is used also in the Check
Domain response when the domain name is not available.

(2303=Object does not exist 9044=Domain is geographic):
Response to a command Create Domain whose execution fails because the
domain name is geographical. This reason is used also in the Check
Domain response when the domain name is not available.

(2304=Object    status    prohibits    operation    8006=Contact    has    status
clientDeleteProhibited):
Response to a command Delete Contact whose execution fails because the
contact object has the status clientDeleteProhibited.

(2304=Object    status    prohibits    operation    8007=Contact    has    status
serverDeleteProhibited):
Response to a command Delete Contact whose execution fails because the
contact object has the status serverDeleteProhibited.

(2304=Object    status    prohibits    operation    8008=Contact    has    status
clientUpdateProhibited):
Response to a command Update Contact whose execution fails because the
contact object has the status clientUpdateProhibited.

(2304=Object    status    prohibits    operation    8009=Contact    has    status
serverUpdateProhibited):
Response to a command Update Contact whose execution fails because the
contact object has the status serverUpdateProhibited.
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(2304=Object    status    prohibits    operation    9022=Domain    has    status
clientTransferProhibited):
Response to a command Domain Transfer (with op:Request) whose execution
fails because the domain object has the status clientTransferProhibited.

(2304=Object    status    prohibits    operation    9023=Domain    has    status
serverTransferProhibited):
Response to a command Domain Transfer (with op:Request) whose execution
fails because the domain object has the status serverTransferProhibited.

(2304=Object    status    prohibits    operation    9024=Domain    has    status
clientDeleteProhibited):
Response to a command Delete Domain whose execution fails because the
domain object has the status clientDeleteProhibited.

(2304=Object    status    prohibits    operation    9025=Domain    has    status
serverDeleteProhibited):
Response to a command Delete Domain whose execution fails because the
domain object has the status serverDeleteProhibited.

(2304=Object    status    prohibits    operation    9026=Domain    has    status
clientUpdateProhibited):
Response to a command whose execution fails because the domain object
has the status clientUpdateProhibited.
Example: attempt to update the nameservers of a domain name with the
Update Domain when in clientUpdateProhibited.

(2304=Object    status    prohibits    operation    9027=Domain    has    status
serverUpdateProhibited):
Response to a command whose execution fails because the domain object
has the status serverUpdateProhibited.
Example: attempt to update the nameservers of a domain name with the
Update Domain when in serverUpdateProhibited.

(2304=Object    status    prohibits    operation    9045=Domain    has    status
clientHold):
Response to a command whose execution fails because the domain object
has the status clientHold.
Example: attempt to change the Regisrant of a domain name (with the
Update Domain) when in clientHold.

(2304=Object    status    prohibits    operation    9047=Domain    has    status
serverHold):
Response to a command whose execution fails because the domain object
has the status serverHold.

(2304=Object  status  prohibits  operation  9055=Domain has status ok):
Response to a command whose execution fails because the domain object
has the status ok.

(2304=Object    status    prohibits    operation    9056=Domain    has    status
inactive):
Response to a command whose execution fails because the domain object
has the status inactive.

(2304=Object status prohibits operation 9057=Domain has status dnsHold):
Response to a command whose execution fails because the domain object
has the status dnsHold.

(2304=Object    status    prohibits    operation    9058=Domain    has    status
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autoRenewPeriod):
Response to a command whose execution fails because the domain object
has the status autoRenewPeriod.

(2304=Object   status   prohibits   operation   9059=Domain   has   status
pendingUpdate):
Response to a command whose execution fails because the domain object
has the status pendingUpdate.

(2304=Object   status   prohibits   operation   9060=Domain   has   status
pendingTransfer):
Response to a command whose execution fails because the domain object
has the status pendingTransfer.

(2304=Object   status   prohibits   operation   9061=Domain   has   status
noRegistrar):
Response to a command whose execution fails because the domain object
has the status noRegistrar.

(2304=Object   status   prohibits   operation   9062=Domain   has   status
toBeReassigned):
Response to a command whose execution fails because the domain object
has the status toBeReassigned.

(2304=Object   status   prohibits   operation   9063=Domain   has   status
challenged):
Response to a command whose execution fails because the domain object
has the status challenged.

(2304=Object   status   prohibits   operation   9064=Domain   has   status
redemptionPeriod):
Response to a command whose execution fails because the domain object
has the status redemptionPeriod.

(2304=Object   status   prohibits   operation   9064=Domain   has   status
serverHold):
Response to a command whose execution fails because the domain object
has the status serverHold.

(2304=Object status prohibits operation 9065=Domain has status revoked):
Response to a command whose execution fails because the domain object
has the status revoked.

(2304=Object   status   prohibits   operation   9066=Domain   has   status
pendingDelete):
Response to a command whose execution fails because the domain object
has the status pendingDelete.

(2304=Object   status   prohibits   operation   9077=Domain   has   status
notRenewed):
Response to a command whose execution fails because the domain object
has the status notRenewed.

(2304=Object   status   prohibits   operation   9081=Domain   has   status
notRenewed):
Response to a command whose execution fails because the domain object is
subjected to a bulk operation.

(2305=Object association prohibits operation 8005=Contact is associated
with domains):

Response to a command Delete Contact whose execution fails because the contact object is still associated with one or more domain names.

(2306=Parameter value policy error 5002=Message ID is not allowed):
Response to a command Poll(with op=Req) whose execution fails because the <msgID> must NOT be specified in the command.

(2306=Parameter value policy error 5003=Message ID is not the ID of the first message in the queue):
Response to a command Poll(with op=Ack) whose execution fails because the ID of the message to remove from the queue (confirming reading) does NOT coincide with the one actually at the head of the queue.

(2306=Parameter value policy error 7002=Duplicate IP addresses):
Response to a command Create/Update Domain whose execution fails because the same IP address has been specified more than once for different hosts.

(2306=Parameter value policy error 7008=IP address to add already exists):
Response to a command Update Domain whose execution fails because an IP address has been specified that is already present in an existing host and which will not be removed with the same command.

(2306=Parameter value policy error 8002=Contact ID prefix not allowed):
Response to a command Create Contact whose execution fails because the contact ID specified contains an invalid prefix.

(2306=Parameter value policy error 8010=Duplicate statuses to add):
Response to a command Update Contact whose execution fails because the same status to add is inserted more than once in the command.

(2306=Parameter value policy error 8011=Duplicate statuses to remove):
Response to a command Update Contact whose execution fails because because the same status to remove is inserted more than once in the command.

(2306=Parameter value policy error 8031=Postal information in international form is not allowed):
Response to a command Create/Update Contact whose execution fails because "int" PostalInfo has been specified.
NB: we only accept "loc" (local) addresses.

(2306=Parameter value policy error 8043=Postal information: name cannot be changed for a Registrant with the entity type = 1):
Response to a command Update Contact for a Registrant (with EntityType=1) whose execution fails because in this case the <contact:name> field cannot be changed.

(2306=Parameter value policy error 8044=Postal information: org cannot be changed for a registrant):
Response to a command Update Contact for a Registrant whose execution fails because the <contact:org> field cannot be changed.

(2306=Parameter value policy error 8045=Postal information: cc cannot be changed for a registrant with the entity type <> 1):
Response to a command Update Contact for a Registrant (with EntityType<>1) whose execution fails because the <contact:cc> cannot be changed.

(2306=Parameter value policy error 8056=Registrant: contact already present as registrant - update is prohibited):
Response to a command Update Contact for a Registrant whose execution fails because Registrant data cannot be changed once they have been set either via a Create Contact or Update Contact after a Create Contact.

(2306=Parameter value policy error 8057=Registrant: registrant with the entity type = 1 org and name are different):
Response to a command Create or Update Contact for a type 1 Registrant whose execution fails because the org and name fields are different.

(2306=Parameter value policy error 9004=Duplicate names of name server):
Response to a command Create/Update Domain whose execution fails because the same name server has been inserted several times.

Unused (2306=Parameter value policy error 9008=Zone is not managed):
Response to a command Create Domain whose execution fails because the domain name belongs to a zone that is NOT managed by the Registry.
Example: paperino.net

(2306=Parameter value policy error 9009=New registrant ID is current registrant ID):
Response to a command Update Domain (to modify Registrant) whose execution fails because the new Registrant submitted coincides with the current one.

(2306=Parameter value policy error 9037=Duplicate contacts):
Response to a command Create Domain whose execution fails because the same contact has been referred several times with the same role.
Example: creation of a domain name with the same two technical contacts.

(2306=Parameter value policy error 9075=Duplicate statuses to add):
Response to a Domain/Contact Update command whose execution fails because in the command the status to add has been inserted several times.

(2306=Parameter value policy error 9076=Duplicate statuses to remove):
Response to a Domain/Contact Update command whose execution fails because in the command the status to remove has been inserted several times.

(2306=Parameter value policy error 10001=DNSSEC: Registrar is not DNSSEC accredited):
Response to any EPP request, from a "non DNSSEC accredited" Registrar, whose execution fails because one or both the following namespaces have been inserted:
• urn:ietf:params:xml:ns:secDNS-1.1;
• http://www.nic.it/ITNIC-EPP/extsecDNS-1.0.

(2306=Parameter value policy error 10005=DNSSEC: no dsData to remove or add):
Response to an Update Domain command, from a "DNSSEC accredited" Registrar, whose execution fails because within the <secDNS:update> element there is neither the <secDNS:add> element nor the <secDNS:rem> element, or there is the <secDNS:rem> element which contains neither single <secDNS:dsData> elements nor the <secDNS:all> element.

(2306=Parameter value policy error 10007=DNSSEC: invalid digestType value):
Response to a Create/Update Domain command, from a "DNSSEC accredited"

Registrar, whose execution fails because a <secDNS:dsData> element contains an unsupported or invalid *digestType* value (see Section 5.1).

(2306=Parameter value policy error 10008=DNSSEC: invalid alg value):
Response to a Create/Update Domain command, from a "DNSSEC accredited" Registrar, whose execution fails because a <secDNS:dsData> element contains an unsupported or invalid *alg* value (see Section 5.1).

(2306=Parameter value policy error 10009=DNSSEC: invalid digest value):
Response to a Create/Update Domain command, from a "DNSSEC accredited" Registrar, whose execution fails because a <secDNS:dsData> element contains a value of the *digest* field whose length is not compatible with the chosen *digest type*.

(2306=Parameter value policy error 10010=DNSSEC: duplicate dsData):
Response to a Create/Update Domain command, from a "DNSSEC accredited" Registrar, whose execution fails because there are 2 <secDNS:dsData> elements containing the same values for the foreseen 4 fields.

(2306=Parameter value policy error 10011=DNSSEC: dsData to add is already associated with the domain):
Response to an Update Domain command, from a "DNSSEC accredited" Registrar, whose execution fails because in the <secDNS:add> element there is a DS record already associated with the domain name.

(2306=Parameter value policy error 10012=DNSSEC: dsData to remove is not associated with the domain):
Response to an Update Domain command, from a "DNSSEC accredited" Registrar, whose execution fails because in the <secDNS:rem> element there is a DS record not associated with the domain name.

(2308=Data management policy violation 5050=Command limit exceeded):
Response to a command whose execution fails because the limit of MAX_CMD parameter defined by the system policy, specified in the table at paragraph 6.11 , has been exceeded.

(2308=Data management policy violation 7005=Too few IP addresses):
Response to a command Create/Update Domain whose execution fails because (one or more of the name servers) have been specified with a number of IP addresses lower than the number defined by the system policy.

(2308=Data management policy violation 7006=Too many IP addresses):
Response to a command Create/Update Domain whose execution fails because one or more of the name servers) have been specified with a number of IP addresses higher than the number defined by the system policy.

(2308=Data management policy violation 7007=One v4 IP address for this host is required):
Response to a command Create/Update Domain whose execution fails because at least one IPv4 address has NOT been specified for a name server.

Unused (2308=Data management policy violation 7009=IP V6 address currently unsupported):
Response to a command Create/Update Domain whose execution fails because one IPv6 address has been specified for a name server.

(2308=Data management policy violation 8014=Status to add is already associated with the contact):
Response to a command Update Contact for the addition of a status whose execution fails because the status to add is already associated with the

contact.

(2308=Data management policy violation 8015=Status to remove is not associated with the contact):
Response to a command Update Contact for the removal status whose execution fails because the status to remove is NOT associated with the contact.

(2308=Data management policy violation 8017=Too many postal information elements in localized form):
Response to a command Create/Update Contact whose execution fails because a number of PostalInfo addresses have been inserted that is greater than the maximum defined by the system policy.

(2308=Data management policy violation 8029=Registrant: registrant with the entity type = 1 and admin are different):
Response to a command Create/Update Domain whose execution fails because the constraint of the Registrant (with entityType=1) coinciding with the admin contact (admin) of the domain name has not been respected.

(2308=Data management policy violation 8030=Contact is not a registrant):
Response to a command Create/Update Domain whose execution fails because the ID contact specified in <domain:registrant> is NOT in reality a Registrant.

(2308=Data management policy violation 8038=Postal information: too many streets):
Response to a command Create/Update Contact whose execution fails because a number of <contact:street> have been specified that is greater than the maximum number defined by the system policy.

(2308=Data management policy violation 8050=Contact is not sponsored by the registrar):
Response to a command whose execution fails because one or more contacts in the command belong to another Registrar.
Example: in the command Create Domain, Update Domain and also in the Update Contact.

(2308=Data management policy violation 8060=Registrant: registrant cannot be a minor):
Response to a command Create or Update Contact for a type 1 Registrant whose execution fails because the Registrant is a minor.

(2308=Data management policy violation 8069=Registrant: country code is not allowed):
Response to a command Create or Update Contact for a non type 1 Registrant (the country code always overrides the nationality code) or type 1 Registrant (if nationality code is not enabled then country code is considered) whose execution fails because coutry code is not enabled.

(2308=Data management policy violation 9005=Too few name servers):
Response to a command Create/Update Domain whose execution fails because the number of nameservers is lower than the minimum allowed by the system policy.

(2308=Data management policy violation 9006=Too many name servers):
Response to a command Create/Update Domain whose execution fails because the number of name server is greater than the maximum allowed by the system policy.

(2308=Data management policy violation 9010=At least one administrative contact is required):
Response to a command Create/Update Domain whose execution fails because the administrative contact has NOT been specified.
(2308=Data management policy violation 9011=Too few administrative contacts):
Response to a command Create/Update Domain whose execution fails because the number of administrative contacts is lower than the minimum allowed by the system policy.

(2308=Data management policy violation 9012=Too many administrative contacts):
Response to a command Create/Update Domain whose execution fails because the number of administrative contacts is greater than the maximum allowed by the system policy.

(2308=Data management policy violation 9013=At least one tech contact is required):
Response to a command Create/Update Domain whose execution fails because the technical contact has NOT been specified.

(2308=Data management policy violation 9014=Too few technical contacts):
Response to a command Create/Update Domain whose execution fails because the number of technical contacts is lower than the minimum allowed by the system policy.

(2308=Data management policy violation 9015=Too many technical contacts):
Response to a command Create/Update Domain whose execution fails because the number of technical contacts is greater than the maximum allowed by the system policy.

(2308=Data management policy violation 9028=Contact to add is already associated with the domain):
Response to a command Update Domain whose execution fails because the contact to add is already associated with the domain name.

(2308=Data management policy violation 9029=Contact to remove is not associated with the domain):
Response to a command Update Domain whose execution fails because the contact to remove is NOT currently associated with the domain name.

(2308=Data management policy violation 9032=Status to add is already associated with the domain):
Response to a command Update Domain whose execution fails because the status to add is already associated with the domain name.

(2308=Data management policy violation 9033=Status to remove is not associated with the domain):
Response to a command Update Domain whose execution fails because the status to remove is NOT associated with the domain name.

(2308=Data management policy violation 9034=Name server to add is already associated with the domain):
Response to a command Update Domain whose execution fails because the name server to add is already associated with the domain name.

(2308=Data management policy violation 9035=Name server to remove is not associated with the domain):

Response to a command Update Domain whose execution fails because the name server to remove is NOT associated with the domain name.

(2308=Data management policy violation 9041=Update domain combination of status, name server and registrant is not allowed):
Response to a command Update Domain whose execution fails because simultaneous operations between any two of the following: change of the status, change of the name servers/DS records, restoration of a cancelled domain name and change of the Registrant are not allowed.

(2308=Data management policy violation 9048=Name server to add is subordinate for the domain but has no IP addresses):
Response to a Create/Update Domain command whose execution fails because the nameserver to associate is subordinate to the domain name and no IP addresses were specified.

(2308=Data management policy violation 9070=Billing contacts prohibited):
Response to a command Create/Update Domain whose execution fails because the billing contacts have been specified.

(2308=Data management policy violation 9074=At least two name servers are required):
Response to a command Create Domain whose execution fails because no name server has been specified.

(2308=Data management policy violation 9078=Domain names deleted by less than 7 days must be registered on epp-deleted.nic.it (epp-deleted.pubtest.nic.it for test environment)):
Response to a command Create Domain whose execution fails because the doman name to create is deleted less than 7 days ago and the request has been sent to epp.nic.it (or epp.pubtest.nic.it for test enviroment).

(2308=Data management policy violation 9079=Request for domain references an uncompleted contact. A mandatory field is empty or has a wrong value):
Response to any command requested on a domain name whose execution fails because the requests references a contact with uncompleted data. The contact has been migrated from the old "asynchronous" registration system and it should be normalized before being referred in a new acquisition done by the synchronous system.

(2308=Data management policy violation 9080=Request for domain references an uncompleted registrant. A mandatory field is empty or has a wrong value):
Response to any command requested on a domain name whose execution fails because the requests references a Registrant with uncompleted or wrong data. The Registrant has been migrated from the old "asynchronous" registration system and it should be normalized before being referred in a new acquisition done by the synchronous system.

(2308=Data management policy violation 9083=Only domain names deleted by less than 7 days can be registered on this server):
Response to a command Create Domain whose execution fails because the doman name to create is NOT deleted less than 7 days ago and the request has been sent to epp-deleted.nic.it (epp-deleted.pubtest.nic.it for test environment).

(2308=Data management policy violation 10006=DNSSEC: too many dsData items):

Response to a Create/Update Domain command, from a "DNSSEC accredited" Registrar, whose execution fails because the number of <secDNS:dsData> elements are not compatible with MAX_DS_IN_CREATE/MAX_DS_IN_UPDATE parameters described in the table included in Section "6.11 Other useful parameters".

(2400=Command failed 4000=Database error):
Response to a command whose execution fails due to an access to the database error. It is an error in the system and does NOT depend on the command sent by the client.

(2400=Command failed 4001=Concurrency error):
Response to a command whose execution fails due to concurrency problems on the EPP transaction.

(2400=Command failed 4013=Unexpected session ID inserted in Hello or Login request):
Response to a command Hello/Login whose execution fails (causing the ending of session) because the client has used in the request a session identifier before receiving it in the Greeting/Login response.

(2400=Command failed 5052=User IP address is not allowed):
Response to a command Login whose execution fails (causing termination of current session) because the client IP address is NOT allowed to integrate with the system.

(2400=Command failed 5057=Command IP address is not equal to Login IP address):
Response to a command whose execution fails because sent from an IP address different from the one used to send the Login command but with the same session ID.

(2400=Command failed 6006=Login command failed):
Response to a command Login whose execution fails because the username is incorrect.

(2502=Session limit exceeded; server closing connection 5051=Session opened limit exceeded):
Response to a command whose execution fails (causing termination of current session) because the maximum number of simultaneous sessions permitted by the system has been exceeded.

10 Appendix E - Latin-1 Supplement Charset

Unicode Encoding	Character	Description
U+00E0	à	LATIN SMALL LETTER A WITH GRAVE
U+00E1	á	LATIN SMALL LETTER A WITH ACUTE
U+00E2	â	LATIN SMALL LETTER A WITH CIRCUMFLEX
U+00E3	ã	LATIN SMALL LETTER A WITH TILDE
U+00E4	ä	LATIN SMALL LETTER A WITH DIAERESIS
U+00E5	å	LATIN SMALL LETTER A WITH RING ABOVE
U+00E6	æ	LATIN SMALL LETTER AE
U+00E7	ç	LATIN SMALL LETTER C WITH CEDILLA
U+00E8	è	LATIN SMALL LETTER E WITH GRAVE
U+00E9	é	LATIN SMALL LETTER E WITH ACUTE
U+00EA	ê	LATIN SMALL LETTER E WITH CIRCUMFLEX
U+00EB	ë	LATIN SMALL LETTER E WITH DIAERESIS
U+00EC	ì	LATIN SMALL LETTER I WITH GRAVE
U+00ED	í	LATIN SMALL LETTER I WITH ACUTE
U+00EE	î	LATIN SMALL LETTER I WITH CIRCUMFLEX
U+00EF	ï	LATIN SMALL LETTER I WITH DIAERESIS
U+00F0	ð	LATIN SMALL LETTER ETH
U+00F1	ñ	LATIN SMALL LETTER N WITH TILDE
U+00F2	ò	LATIN SMALL LETTER O WITH GRAVE
U+00F3	ó	LATIN SMALL LETTER O WITH ACUTE
U+00F4	ô	LATIN SMALL LETTER O WITH CIRCUMFLEX
U+00F5	õ	LATIN SMALL LETTER O WITH TILDE
U+00F6	ö	LATIN SMALL LETTER O WITH DIAERESIS
U+00F8	ø	LATIN SMALL LETTER O WITH STROKE
U+00F9	ù	LATIN SMALL LETTER U WITH GRAVE
U+00FA	ú	LATIN SMALL LETTER U WITH ACUTE
U+00FB	û	LATIN SMALL LETTER U WITH CIRCUMFLEX
U+00FC	ü	LATIN SMALL LETTER U WITH DIAERESIS
U+00FD	ý	LATIN SMALL LETTER Y WITH ACUTE
U+00FE	þ	LATIN SMALL LETTER THORN
U+00FF	ÿ	LATIN SMALL LETTER Y WITH DIAERESIS
U+00DF	ß	LATIN SMALL LETTER SHARP S

11 Appendix F - Latin Extended-A Charset

Unicode Encoding	Character	Description
U+0101	ā	LATIN SMALL LETTER A WITH MACRON
U+0103	ă	LATIN SMALL LETTER A WITH BREVE
U+0105	ą	LATIN SMALL LETTER A WITH OGONEK
U+0107	ć	LATIN SMALL LETTER C WITH ACUTE
U+0109	ĉ	LATIN SMALL LETTER C WITH CIRCUMFLEX
U+010B	ċ	LATIN SMALL LETTER C WITH DOT ABOVE
U+010D	č	LATIN SMALL LETTER C WITH CARON
U+010F	ď	LATIN SMALL LETTER D WITH CARON
U+0111	đ	LATIN SMALL LETTER D WITH STROKE
U+0113	ē	LATIN SMALL LETTER E WITH MACRON
U+0115	ĕ	LATIN SMALL LETTER E WITH BREVE
U+0117	ė	LATIN SMALL LETTER E WITH DOT ABOVE
U+0119	ę	LATIN SMALL LETTER E WITH OGONEK
U+011B	ě	LATIN SMALL LETTER E WITH CARON
U+011D	ĝ	LATIN SMALL LETTER G WITH CIRCUMFLEX
U+011F	ğ	LATIN SMALL LETTER G WITH BREVE
U+0121	ġ	LATIN SMALL LETTER G WITH DOT ABOVE
U+0123	ģ	LATIN SMALL LETTER G WITH CEDILLA
U+0125	ĥ	LATIN SMALL LETTER H WITH CIRCUMFLEX
U+0127	ħ	LATIN SMALL LETTER H WITH STROKE
U+0129	ĩ	LATIN SMALL LETTER I WITH TILDE
U+012B	ī	LATIN SMALL LETTER I WITH MACRON
U+012D	ĭ	LATIN SMALL LETTER I WITH BREVE
U+012F	į	LATIN SMALL LETTER I WITH OGONEK
U+0131	ı	LATIN SMALL LETTER DOTLESS I
U+0135	ĵ	LATIN SMALL LETTER J WITH CIRCUMFLEX
U+0137	ķ	LATIN SMALL LETTER K WITH CEDILLA
U+013°	ĺ	LATIN SMALL LETTER L WITH ACUTE
U+013C	ļ	LATIN SMALL LETTER L WITH CEDILLA
U+013E	ľ	LATIN SMALL LETTER L WITH CARON
U+0140	ŀ	LATIN SMALL LETTER L WITH MIDDLE DOT
U+0142	ł	LATIN SMALL LETTER L WITH STROKE
U+0144	ń	LATIN SMALL LETTER N WITH ACUTE
U+0146	ņ	LATIN SMALL LETTER N WITH CEDILLA
U+0148	ň	LATIN SMALL LETTER N WITH CARON
U+0149	ŉ	LATIN SMALL LETTER N PRECEDED BY APOSTROPHE
U+014B	ŋ	LATIN SMALL LETTER ENG
U+014D	ō	LATIN SMALL LETTER O WITH MACRON
U+014F	ŏ	LATIN SMALL LETTER O WITH BREVE
U+0151	ő	LATIN SMALL LETTER O WITH DOUBLE ACUTE
U+0153	œ	LATIN SMALL LIGATURE OE
U+0155	ŕ	LATIN SMALL LETTER R WITH ACUTE
U+0157	ŗ	LATIN SMALL LETTER R WITH CEDILLA
U+0159	ř	LATIN SMALL LETTER R WITH CARON
U+015B	ś	LATIN SMALL LETTER S WITH ACUTE
U+015D	ŝ	LATIN SMALL LETTER S WITH CIRCUMFLEX
U+0161	š	LATIN SMALL LETTER S WITH CARON
U+0165	ť	LATIN SMALL LETTER T WITH CARON
U+0167	ŧ	LATIN SMALL LETTER T WITH STROKE
U+0169	ũ	LATIN SMALL LETTER U WITH TILDE

U+016B	ū	LATIN SMALL LETTER U WITH MACRON
U+016D	ŭ	LATIN SMALL LETTER U WITH BREVE
U+016F	ů	LATIN SMALL LETTER U WITH RING ABOVE
U+0171	ű	LATIN SMALL LETTER U WITH DOUBLE ACUTE
U+0173	ų	LATIN SMALL LETTER U WITH OGONEK
U+0175	ŵ	LATIN SMALL LETTER W WITH CIRCUMFLEX
U+0177	ŷ	LATIN SMALL LETTER Y WITH CIRCUMFLEX
U+017°	ź	LATIN SMALL LETTER Z WITH ACUTE
U+017C	ż	LATIN SMALL LETTER Z WITH DOT ABOVE
U+017E	ž	LATIN SMALL LETTER Z WITH CARON

12 Appendix G - Latin Extended-B Charset

Unicode Encoding	Character	Description
U+0219	ș	LATIN SMALL LETTER S WITH COMMA BELOW
U+021B	ț	LATIN SMALL LETTER T WITH COMMA BELOW

13 Appendix H - Greek Charset

Unicode Encoding	Character	Description
U+0390	ΐ	GREEK SMALL LETTER IOTA WITH DIALYTIKA AND TONOS
U+03AC	ά	GREEK SMALL LETTER ALPHA WITH TONOS
U+03AD	έ	GREEK SMALL LETTER EPSILON WITH TONOS
U+03AE	ή	GREEK SMALL LETTER ETA WITH TONOS
U+03AF	ί	GREEK SMALL LETTER IOTA WITH TONOS
U+03B0	ΰ	GREEK SMALL LETTER UPSILON WITH DIALYTIKA AND TONOS
U+03B1	α	GREEK SMALL LETTER ALPHA
U+03B2	β	GREEK SMALL LETTER BETA
U+03B3	γ	GREEK SMALL LETTER GAMMA
U+03B4	δ	GREEK SMALL LETTER DELTA
U+03B5	ε	GREEK SMALL LETTER EPSILON
U+03B6	ζ	GREEK SMALL LETTER ZETA
U+03B7	η	GREEK SMALL LETTER ETA
U+03B8	θ	GREEK SMALL LETTER THETA
U+03B9	ι	GREEK SMALL LETTER IOTA
U+03BA	κ	GREEK SMALL LETTER KAPPA
U+03BB	λ	GREEK SMALL LETTER LAMBDA
U+03BC	μ	GREEK SMALL LETTER MU
U+03BD	ν	GREEK SMALL LETTER NU
U+03BE	ξ	GREEK SMALL LETTER XI
U+03BF	ο	GREEK SMALL LETTER OMICRON
U+03C0	π	GREEK SMALL LETTER PI
U+03C1	ρ	GREEK SMALL LETTER RHO
U+03C2	ς	GREEK SMALL LETTER FINAL SIGMA
U+03C3	σ	GREEK SMALL LETTER SIGMA
U+03C4	τ	GREEK SMALL LETTER TAU
U+03C5	υ	GREEK SMALL LETTER UPSILON
U+03C6	φ	GREEK SMALL LETTER PHI
U+03C7	χ	GREEK SMALL LETTER CHI
U+03C8	ψ	GREEK SMALL LETTER PSI
U+03C9	ω	GREEK SMALL LETTER OMEGA
U+03CA	ϊ	GREEK SMALL LETTER IOTA WITH DIALYTIKA
U+03CB	ϋ	GREEK SMALL LETTER UPSILON WITH DIALYTIKA
U+03CC	ό	GREEK SMALL LETTER OMICRON WITH TONOS
U+03CD	ύ	GREEK SMALL LETTER UPSILON WITH TONOS
U+03CE	ώ	GREEK SMALL LETTER OMEGA WITH TONOS

14 Appendix I - Greek Extended Charset

Unicode Encoding	Character	Description
U+1F00	ἀ	GREEK SMALL LETTER ALPHA WITH PSILI
U+1F01	ἁ	GREEK SMALL LETTER ALPHA WITH DASIA
U+1F02	ἂ	GREEK SMALL LETTER ALPHA WITH PSILI AND VARIA
U+1F03	ἃ	GREEK SMALL LETTER ALPHA WITH DASIA AND VARIA
U+1F04	ἄ	GREEK SMALL LETTER ALPHA WITH PSILI AND OXIA
U+1F05	ἅ	GREEK SMALL LETTER ALPHA WITH DASIA AND OXIA
U+1F06	ἆ	GREEK SMALL LETTER ALPHA WITH PSILI AND PERISPOMENI
U+1F07	ἇ	GREEK SMALL LETTER ALPHA WITH DASIA AND PERISPOMENI
U+1F10	ἐ	GREEK SMALL LETTER EPSILON WITH PSILI
U+1F11	ἑ	GREEK SMALL LETTER EPSILON WITH DASIA
U+1F12	ἒ	GREEK SMALL LETTER EPSILON WITH PSILI AND VARIA
U+1F13	ἓ	GREEK SMALL LETTER EPSILON WITH DASIA AND VARIA
U+1F14	ἔ	GREEK SMALL LETTER EPSILON WITH PSILI AND OXIA
U+1F15	ἕ	GREEK SMALL LETTER EPSILON WITH DASIA AND OXIA
U+1F20	ἠ	GREEK SMALL LETTER ETA WITH PSILI
U+1F21	ἡ	GREEK SMALL LETTER ETA WITH DASIA
U+1F22	ἢ	GREEK SMALL LETTER ETA WITH PSILI AND VARIA
U+1F23	ἣ	GREEK SMALL LETTER ETA WITH DASIA AND VARIA
U+1F24	ἤ	GREEK SMALL LETTER ETA WITH PSILI AND OXIA
U+1F25	ἥ	GREEK SMALL LETTER ETA WITH DASIA AND OXIA
U+1F26	ἦ	GREEK SMALL LETTER ETA WITH PSILI AND PERISPOMENI
U+1F27	ἧ	GREEK SMALL LETTER ETA WITH DASIA AND PERISPOMENI
U+1F30	ἰ	GREEK SMALL LETTER IOTA WITH PSILI
U+1F31	ἱ	GREEK SMALL LETTER IOTA WITH DASIA
U+1F32	ἲ	GREEK SMALL LETTER IOTA WITH PSILI AND VARIA
U+1F33	ἳ	GREEK SMALL LETTER IOTA WITH DASIA AND VARIA
U+1F34	ἴ	GREEK SMALL LETTER IOTA WITH PSILI AND OXIA
U+1F35	ἵ	GREEK SMALL LETTER IOTA WITH DASIA AND OXIA
U+1F36	ἶ	GREEK SMALL LETTER IOTA WITH PSILI AND PERISPOMENI
U+1F37	ἷ	GREEK SMALL LETTER IOTA WITH DASIA AND PERISPOMENI
U+1F40	ὀ	GREEK SMALL LETTER OMICRON WITH PSILI
U+1F41	ὁ	GREEK SMALL LETTER OMICRON WITH DASIA
U+1F42	ὂ	GREEK SMALL LETTER OMICRON WITH PSILI AND VARIA
U+1F43	ὃ	GREEK SMALL LETTER OMICRON WITH DASIA AND VARIA
U+1F44	ὄ	GREEK SMALL LETTER OMICRON WITH PSILI AND OXIA
U+1F45	ὅ	GREEK SMALL LETTER OMICRON WITH DASIA AND OXIA
U+1F50	ὐ	GREEK SMALL LETTER UPSILON WITH PSILI
U+1F51	ὑ	GREEK SMALL LETTER UPSILON WITH DASIA
U+1F52	ὒ	GREEK SMALL LETTER UPSILON WITH PSILI AND VARIA
U+1F53	ὓ	GREEK SMALL LETTER UPSILON WITH DASIA AND VARIA
U+1F54	ὔ	GREEK SMALL LETTER UPSILON WITH PSILI AND OXIA
U+1F55	ὕ	GREEK SMALL LETTER UPSILON WITH DASIA AND OXIA
U+1F56	ὖ	GREEK SMALL LETTER UPSILON WITH PSILI AND PERISPOMENI
U+1F57	ὗ	GREEK SMALL LETTER UPSILON WITH DASIA AND PERISPOMENI
U+1F60	ὠ	GREEK SMALL LETTER OMEGA WITH PSILI
U+1F61	ὡ	GREEK SMALL LETTER OMEGA WITH DASIA
U+1F62	ὢ	GREEK SMALL LETTER OMEGA WITH PSILI AND VARIA
U+1F63	ὣ	GREEK SMALL LETTER OMEGA WITH DASIA AND VARIA
U+1F64	ὤ	GREEK SMALL LETTER OMEGA WITH PSILI AND OXIA
U+1F65	ὥ	GREEK SMALL LETTER OMEGA WITH DASIA AND OXIA

U+1F66	ὦ	GREEK SMALL LETTER OMEGA WITH PSILI AND PERISPOMENI
U+1F67	ὧ	GREEK SMALL LETTER OMEGA WITH DASIA AND PERISPOMENI
U+1F70	ὰ	GREEK SMALL LETTER ALPHA WITH VARIA
U+1F71	ά	GREEK SMALL LETTER ALPHA WITH OXIA
U+1F72	ὲ	GREEK SMALL LETTER EPSILON WITH VARIA
U+1F73	έ	GREEK SMALL LETTER EPSILON WITH OXIA
U+1F74	ὴ	GREEK SMALL LETTER ETA WITH VARIA
U+1F75	ή	GREEK SMALL LETTER ETA WITH OXIA
U+1F76	ὶ	GREEK SMALL LETTER IOTA WITH VARIA
U+1F77	ί	GREEK SMALL LETTER IOTA WITH OXIA
U+1F78	ὸ	GREEK SMALL LETTER OMICRON WITH VARIA
U+1F79	ό	GREEK SMALL LETTER OMICRON WITH OXIA
U+1F7A	ὺ	GREEK SMALL LETTER UPSILON WITH VARIA
U+1F7B	ύ	GREEK SMALL LETTER UPSILON WITH OXIA
U+1F7C	ὼ	GREEK SMALL LETTER OMEGA WITH VARIA
U+1F7D	ώ	GREEK SMALL LETTER OMEGA WITH OXIA
U+1F80	ᾀ	GREEK SMALL LETTER ALPHA WITH PSILI AND YPOGEGRAMMENI
U+1F81	ᾁ	GREEK SMALL LETTER ALPHA WITH DASIA AND YPOGEGRAMMENI
U+1F82	ᾂ	GREEK SMALL LETTER ALPHA WITH PSILI AND VARIA AND YPOGEGRAMMENI
U+1F83	ᾃ	GREEK SMALL LETTER ALPHA WITH DASIA AND VARIA AND YPOGEGRAMMENI
U+1F84	ᾄ	GREEK SMALL LETTER ALPHA WITH PSILI AND OXIA AND YPOGEGRAMMENI
U+1F85	ᾅ	GREEK SMALL LETTER ALPHA WITH DASIA AND OXIA AND YPOGEGRAMMENI
U+1F86	ᾆ	GREEK SMALL LETTER ALPHA WITH PSILI AND PERISPOMENI AND YPOGEGRAMMENI
U+1F87	ᾇ	GREEK SMALL LETTER ALPHA WITH DASIA AND PERISPOMENI AND YPOGEGRAMMENI
U+1F90	ᾐ	GREEK SMALL LETTER ETA WITH PSILI AND YPOGEGRAMMENI
U+1F91	ᾑ	GREEK SMALL LETTER ETA WITH DASIA AND YPOGEGRAMMENI
U+1F92	ᾒ	GREEK SMALL LETTER ETA WITH PSILI AND VARIA AND YPOGEGRAMMENI
U+1F93	ᾓ	GREEK SMALL LETTER ETA WITH DASIA AND VARIA AND YPOGEGRAMMENI
U+1F94	ᾔ	GREEK SMALL LETTER ETA WITH PSILI AND OXIA AND YPOGEGRAMMENI
U+1F95	ᾕ	GREEK SMALL LETTER ETA WITH DASIA AND OXIA AND YPOGEGRAMMENI
U+1F96	ᾖ	GREEK SMALL LETTER ETA WITH PSILI AND PERISPOMENI AND YPOGEGRAMMENI
U+1F97	ᾗ	GREEK SMALL LETTER ETA WITH DASIA AND PERISPOMENI AND YPOGEGRAMMENI
U+1FA0	ᾠ	GREEK SMALL LETTER OMEGA WITH PSILI AND YPOGEGRAMMENI
U+1FA1	ᾡ	GREEK SMALL LETTER OMEGA WITH DASIA AND YPOGEGRAMMENI
U+1FA2	ᾢ	GREEK SMALL LETTER OMEGA WITH PSILI AND VARIA AND YPOGEGRAMMENI
U+1FA3	ᾣ	GREEK SMALL LETTER OMEGA WITH DASIA AND VARIA AND YPOGEGRAMMENI
U+1FA4	ᾤ	GREEK SMALL LETTER OMEGA WITH PSILI AND OXIA AND YPOGEGRAMMENI
U+1FA5	ᾥ	GREEK SMALL LETTER OMEGA WITH DASIA AND OXIA AND YPOGEGRAMMENI
U+1FA6	ᾦ	GREEK SMALL LETTER OMEGA WITH PSILI AND PERISPOMENI AND YPOGEGRAMMENI

U+1FA7	ῷ	GREEK SMALL LETTER OMEGA WITH DASIA AND PERISPOMENI AND YPOGEGRAMMENI
U+1FB0	ᾰ	GREEK SMALL LETTER ALPHA WITH VRACHY
U+1FB1	ᾱ	GREEK SMALL LETTER ALPHA WITH MACRON
U+1FB2	ᾲ	GREEK SMALL LETTER ALPHA WITH VARIA AND YPOGEGRAMMENI
U+1FB3	ᾳ	GREEK SMALL LETTER ALPHA WITH YPOGEGRAMMENI
U+1FB4	ᾴ	GREEK SMALL LETTER ALPHA WITH OXIA AND YPOGEGRAMMENI
U+1FB6	ᾶ	GREEK SMALL LETTER ALPHA WITH PERISPOMENI
U+1FB7	ᾷ	GREEK SMALL LETTER ALPHA WITH PERISPOMENI AND YPOGEGRAMMENI
U+1FC2	ῂ	GREEK SMALL LETTER ETA WITH VARIA AND YPOGEGRAMMENI
U+1FC3	ῃ	GREEK SMALL LETTER ETA WITH YPOGEGRAMMENI
U+1FC4	ῄ	GREEK SMALL LETTER ETA WITH OXIA AND YPOGEGRAMMENI
U+1FC6	ῆ	GREEK SMALL LETTER ETA WITH PERISPOMENI
U+1FC7	ῇ	GREEK SMALL LETTER ETA WITH PERISPOMENI AND YPOGEGRAMMENI
U+1FD0	ῐ	GREEK SMALL LETTER IOTA WITH VRACHY
U+1FD1	ῑ	GREEK SMALL LETTER IOTA WITH MACRON
U+1FD2	ῒ	GREEK SMALL LETTER IOTA WITH DIALYTIKA AND VARIA
U+1FD3	ΐ	GREEK SMALL LETTER IOTA WITH DIALYTIKA AND OXIA
U+1FD6	ῖ	GREEK SMALL LETTER IOTA WITH PERISPOMENI
U+1FD7	ῗ	GREEK SMALL LETTER IOTA WITH DIALYTIKA AND PERISPOMENI
U+1FE0	ῠ	GREEK SMALL LETTER UPSILON WITH VRACHY
U+1FE1	ῡ	GREEK SMALL LETTER UPSILON WITH MACRON
U+1FE2	ῢ	GREEK SMALL LETTER UPSILON WITH DIALYTIKA AND VARIA
U+1FE3	ΰ	GREEK SMALL LETTER UPSILON WITH DIALYTIKA AND OXIA
U+1FE4	ῤ	GREEK SMALL LETTER RHO WITH PSILI
U+1FE5	ῥ	GREEK SMALL LETTER RHO WITH DASIA
U+1FE6	ῦ	GREEK SMALL LETTER UPSILON WITH PERISPOMENI
U+1FE7	ῧ	GREEK SMALL LETTER UPSILON WITH DIALYTIKA AND PERISPOMENI
U+1FF2	ῲ	GREEK SMALL LETTER OMEGA WITH VARIA AND YPOGEGRAMMENI
U+1FF3	ῳ	GREEK SMALL LETTER OMEGA WITH YPOGEGRAMMENI
U+1FF4	ῴ	GREEK SMALL LETTER OMEGA WITH OXIA AND YPOGEGRAMMENI
U+1FF6	ῶ	GREEK SMALL LETTER OMEGA WITH PERISPOMENI
U+1FF7	ῷ	GREEK SMALL LETTER OMEGA WITH PERISPOMENI AND YPOGEGRAMMENI

15 Appendix L - Cyrillic Charset

Unicode Encoding	Character	Description
U+0430	а	CYRILLIC SMALL LETTER A
U+0431	б	CYRILLIC SMALL LETTER BE
U+0432	в	CYRILLIC SMALL LETTER VE
U+0433	г	CYRILLIC SMALL LETTER GHE
U+0434	д	CYRILLIC SMALL LETTER DE
U+0435	е	CYRILLIC SMALL LETTER IE
U+0436	ж	CYRILLIC SMALL LETTER ZHE
U+0437	з	CYRILLIC SMALL LETTER ZE
U+0438	и	CYRILLIC SMALL LETTER I
U+0439	й	CYRILLIC SMALL LETTER SHORT I
U+043A	к	CYRILLIC SMALL LETTER KA
U+043B	л	CYRILLIC SMALL LETTER EL
U+043C	м	CYRILLIC SMALL LETTER EM
U+043D	н	CYRILLIC SMALL LETTER EN
U+043E	о	CYRILLIC SMALL LETTER O
U+043F	п	CYRILLIC SMALL LETTER PE
U+0440	р	CYRILLIC SMALL LETTER ER
U+0441	с	CYRILLIC SMALL LETTER ES
U+0442	т	CYRILLIC SMALL LETTER TE
U+0443	у	CYRILLIC SMALL LETTER U
U+0444	ф	CYRILLIC SMALL LETTER EF
U+0445	х	CYRILLIC SMALL LETTER HA
U+0446	ц	CYRILLIC SMALL LETTER TSE
U+0447	ч	CYRILLIC SMALL LETTER CHE
U+0448	ш	CYRILLIC SMALL LETTER SHA
U+0449	щ	CYRILLIC SMALL LETTER SHCHA
U+044A	ъ	CYRILLIC SMALL LETTER HARD SIGN
U+044B	ы	CYRILLIC SMALL LETTER YERU
U+044C	ь	CYRILLIC SMALL LETTER SOFT SIGN
U+044D	э	CYRILLIC SMALL LETTER E
U+044E	ю	CYRILLIC SMALL LETTER YU
U+044F	я	CYRILLIC SMALL LETTER YA

16 Appendix M - The WHOIS service

16.1 Description

The public WHOIS service of the .it Registry allows the user to carry out researches only for domain name.

The service is available at the following addresses:

- queries via command line:
  - whois.nic.it   (port 43)
  - das.nic.it   (port 4343)

- queries via Web:
  - access by means of http://www.nic.it

The data that are displayed depend on giving or not giving acceptance of the consent for the publication and accessibility via the Internet (expressed via the consentForPublishing field described in the table indicated in section 3.1.1.1) expressed by the subjects referenced in the domain name, that is the Registrant and the Admin and Tech contacts.

16.2 Option: ConsentForPublishing = 1 (true)

In the case in which the consent for the publication of the data is given (ConsentForPublishing = 1), the information displayed are those indicated in the following tables:

Attributes displayed in the Domain object

Name of attribute	Public WHOIS (port 43)	Public WHOIS (via web)
Domain:	YES	YES
Status:	YES	YES
Created:	YES (in the format yyyy-mm-dd hh:mm:ss)	YES
Last Update:	YES (in the format yyyy-mm-dd hh:mm:ss)	YES
Expire Date:	YES (in the format yyyy-mm-dd hh:mm:ss)	YES
Registrant:	YES (the referenced item is visualised)	YES (the referenced item is visualised)
Admin:	YES (the referenced item is visualised)	YES (the referenced item is visualised)
Tech:	YES (the referenced item is visualised)	YES (the referenced item is visualised)
Registrar:	YES (the referenced item is visualised)	YES (the referenced item is visualised)
Nameservers:	YES (name only)	YES (name only)
Signed:	YES	YES

Attributes displayed in the Registrant object

Name of attribute	Public WHOIS (port 43)	Public WHOIS (via web)
Organization:	YES	YES
Address:	YES (address, city, postcode, province and country)	YES (address, city, postcode, province and country)
Nationality:	NO	YES
Phone:	NO	YES
Fax:	NO	YES
E-Mail:	NO	YES
Created:	YES (in the format yyyy-mm-dd hh:mm:ss)	YES
Last Update:	YES (in the format yyyy-mm-dd hh:mm:ss)	YES

Attributes displayed in the Admin and Tech object

Name of attribute	Public WHOIS (port 43)	Public WHOIS (via web)
Name:	YES	YES
Organization:	YES	YES
Address:	YES (address, city, postcode, province and country)	YES (address, city, postcode, province and country)
Phone:	NO	YES
Fax:	NO	YES
E-Mail:	NO	YES
Created:	YES (in the format yyyy-mm-dd hh:mm:ss)	YES
Last Update:	YES (in the format yyyy-mm-dd hh:mm:ss)	YES

Attributes displayed in the Registrar object

Name of attribute	Public WHOIS (port 43)	Public WHOIS (via web)
Organization:	YES	YES
Name:	YES	YES
Web:	YES	YES
DNSSEC:	YES	YES

16.3 Option: ConsentForPublishing = 0 (false)

In the case in which the consent for the publication of the data is not given (ConsentForPublishing = 0), the information displayed are those indicated in the following tables:

Attributes displayed in the Domain object

Name of attribute	Public WHOIS (port 43)	Public WHOIS (via web)
Domain:	YES	YES
Status:	YES	YES
Created:	YES (in the format yyyy-mm-dd hh:mm:ss)	YES
Last Update:	YES (in the format yyyy-mm-dd hh:mm:ss)	YES
Expire Date:	YES (in the format yyyy-mm-dd hh:mm:ss)	YES
Registrant:	YES (the referenced item is visualised)	YES (the referenced item is visualised)
Admin:	YES (the referenced item is visualised)	YES (the referenced item is visualised)
Tech:	YES (the referenced item is visualised)	YES (the referenced item is visualised)
Registrar:	YES (the referenced item is visualised)	YES (the referenced item is visualised)
Nameservers:	YES (name only)	YES (name only)
Signed:	YES	YES

Attributes displayed in the Registrant object of natural person entity type (EntityType = 1)

Name of attribute	Public WHOIS (port 43)	Public WHOIS (via web)
Organization:	NO	NO

Attributes displayed in the Registrant object of other than natural person entity type (EntityType <> 1)

Name of attribute	Public WHOIS (port 43)	Public WHOIS (via web)
Organization:	YES	YES

Attributes displayed in the Admin and Tech objects

Name of attribute	Public WHOIS (port 43)	Public WHOIS (via web)
Name:	NO	NO
Organization:	NO	NO

Attributes displayed in the Registrar object

Name of attribute	Public WHOIS (port 43)	Public WHOIS (via web)
Organization:	YES	YES
Name:	YES	YES
Web:	YES	YES
DNSSEC:	YES	YES

16.4 Example of WHOIS output for a geographical or reserved domain name

```
Domain:      <domainname>
Status:      UNASSIGNABLE
```

16.5 Example of WHOIS output for a not registered domain name

```
Domain:      <domainname>
Status:      AVAILABLE
```

16.6 DAS service

The DAS service (Domain Availability Service) allows the user to carry out queries only for domain names and checks availability or not.

Host name: das.nic.it
Port: 4343

Result:

- if the domain name is registered:
  ```
  Domain: <domainname>
  Status: NOT AVAILABLE
  ```

- if the domain name is not registered and, therefore, it is available:
  ```
  Domain: <domainname>
  Status: AVAILABLE
  ```

- if the domain name is geographic or reserved and, therefore, it is not available:
  ```
  Domain: <domainname>
  Status: UNASSIGNABLE
  ```

17 Glossary

The following table contains the definition of the terms used in this document.

Term	Definition
A Record	Acronym of Address, resource record that shows the correspondence between a name and an IPv4 address.
Accreditation	Verification of Registrar's technical ability to operate the synchronous system.
ASCII	Acronym of American Standard Code for Information Interchange, it is a 7 bit character-encoding commonly used in computers.
Atomic commands	Commands for one specified action. EPPs are atomic commands - there are no successes or partial failures even if the related request may not terminate.
Authinfo	Authorization password used by the Registrant to request specific operations.
Auto renew period	The grace period following the automatic renewal of a domain name on expiry of its validity.
Authoritative Nameserver	Nameserver that has the data for a particular zone of the name tree.
Billing	The cost of transactions that will be listed on the invoice to be sent to the Registrar. The invoice contains all the transactions carried out by the Registrar in respect of a particular payment. The billing may not necessarily take place at the same time as the charge.
Bulk Transfer	Transfer, between two Registrars, of a considerable number of domain names.
Cardinality	Minimum or maximum value of definition options for a field.
ccTLD	Acronym of country code Top Level Domain, a tag that univocally identifies a nation on the basis of ISO-3166 encoding (e.g. Italy = "it").
Change	Operation that allows the information associated with a domain name or a contact registered in the DBAN to be changed. This operation can be carried out by Registrars, Registrants and by the Registry.
Client	Computer that accesses resources supplied by another computer (server) on a local network or on the Internet.
CNAME (Record)	Acronym of Canonical Name, a record that defines an alternative name with which the same machine can be identified. Resource record used to create alias.
Command	One or more specific words in the operating system or in the management menu of programs that are digited via the keyboard or activated using a mouse, which execute a particular operation.
Database of Assigned Names (DBAN)	Database maintained by the .it Registry, where all the data regarding assigned domain names in the ccTLD .it are managed. In this document, DBAN, Registry Database and Database of the Registry are equivalent.
DBAN	Acronym of Database of Assigned Names, database maintained by the .it Registry, where all the data regarding domain names assigned by the ccTLD .it are managed. In this document, DBAN, Registry Database and Database of the Registry are equivalent.

DS Record	Acronym of Delegation Signer (DS), resource record used by DNSSEC for implementing the "chain-of-trust" between a parent zone and a child zone. A zone manager generates a "digest" of the public key (DNSKEY record) associated with the digitally signed domain name and transmits it to the parent zone manager who associates it with the delegation of that domain name through a DS record.
Debit	Withdrawal from Registrar's credit of the cost of transactions that can be invoiced, including any VAT. The cost of each transaction/operation is debited immediately so that the Registrar's credit is always up to date.
Default	Preset value if user gives no specific value.
Digest	The hash generated from the public key.
DNS	Acronym of Domain Name System, a system used to convert domain names into IP addresses and vice versa.
DNSKEY Record	Resource record defined by the DNSSEC containing a public key.
DNSSEC	Acronym of Domain Name System SECurity extensions. Protocol defined by IETF which uses public/private keys for cryptography to ensure that the information is coming from an authoritative source, and has not been altered during its transport through the network. DNSSEC enables: - DNS servers to sign their own resource records (RR) with a private key; - DNS resolvers to verify the information through its public key.
DNS Delegation	Through entering records in the respective files of the zone, allows the activation of a domain name on the Internet.
Domain name	Association between a public IP address and a string of characters to guarantee the consistency of the associations between IP addresses and domain names. The conversion of domain names into IP addresses and vice versa is guaranteed by the Domain Name System (DNS). A domain name is made up of several parts.
Drop Time	Process that provides for the cancellation of the domain names that are in pendingDelete/*pendingDelete* status, at fixed times.
DRSPs	Acronym of Dispute Resolution Service Providers. Organizations accredited by the Registry of the ccTLD .it for managing disputes regarding the reassignment of domain names registered in the ccTLD .it, according to the document "Procedures for the accreditation of providers of service-out-of-court settlement of disputes of the ccTLD .it." available on the Web site of the Registry.
DUPn	Format of the ID contacts used in the duplication of the contacts following a Domain Transfer operation.
EPP	Acronym of Extensible Provisioning Protocol, synchronous client-server protocol based on XML. In the implementation of the .it Registry, it offers secure connections for managing objects linked to the registration and maintenance of domain names.
Expire	Field that shows, for invoicing, the expiry date of a domain name registered in the DBAN. It is automatically updated by the system at the end of the maintenance period of a domain name (one year).
Extensible Protocol	The EPP is an extensible protocol since its validity extends to other types of standards.
Extension	Sequence of alphanumerical characters that specifies a command.
First come first served	Chronological order of arrival that determine the order in which requests are processed.
Glue record	IP address of a nameserver necessary for the correct functioning of the resolution process of domain names.
Grace period / autoRenewPeriod	The 15 (fifteen) days immediately following the expiry of the domain name.

GDPR	Acronym of "General Data Protection Regulation", is the European Data Protection Regulation, issued by the European Parliament and of the Council on the protection of natural persons with regard to the processing of personal as well as the free circulation of such data (n. 2016/679 of April 27, 2016).
gTLD	Acronym of generic Top Level Domain, univocal tag for the suffix of a tree of Internet domain names, of a generic type: the generic TLDs or gTLDs are made up of 3 or more characters, and can be subdivided into two kinds: "sponsored" TLDs (sTLDs) and "unsponsored" TLDs (uTLDs).
Host / Nameserver / Name server	Server that translates a network address in textual format into the corresponding numerical address. It is also known as DNS (Domain Name System). The nameserver can be subordinate or not subordinate to the associated domain name. For example, the nameserver ns.example.it is subordinate to the domain name example.it. In this document "host", "name server" and "nameserver" are equivalent and they are used to identify a generic nameserver.
HTTPS	Secure HTTP protocol for access to web server.
ICANN	Acronym of Internet Corporation for Assigned Names and Numbers, a not for profit organization responsible for Internet Protocol addresses, the protocol identifiers, managing Top-Level Domains, generic domains (gTLD) and the interntional code (ccTLD), as well as the root server. ICANN safeguards the operating stability of the Internet, promotes competition, wides the representation of the global community of the Internet and develops policies via participatory and consensual processes (http://www.icann.org).
ID	Acronym of IDentifier, alphanumeric code that univocally identifies a contact ("registrant", "admin" or "tech") within the DBAN.
IDN (Internationalised Domain Name)	Domain name containing non-ASCII characters, such as letters with accent, which belong to the charset Latin-1 Supplement, Latin Extended-A, Latin Extended-B, Greek, Greek Extended and Cyrillic. The non-ASCII characters indicated above enable the registration of the IDNs in the 24 official languages of the European Union.
IETF	Acronym of Internet Engineering Task Force, it is an international community concerned with the development and the promotion of standard Internet (https://www.ietf.org/).
Implement	Design and devleop a system.
Internet	Network of calculators around the world that interconnect thousands of national and international networks that use TCP/IP protocol, thus allowing the exchange of information.
IP	Acronym of Internet Protocol, it was created to interconnect heterogeneous networks by technology, performance and management. The current version is also called IPv4 to distinguish it from the more recent IPv6 that was conceived so as to manage better the increasing number of computers connected to the Internet.
IP address	Acronym of Internet Protocol address, it is a numerical sequence that univocally identifies a machine that is connected to the Internet, either permanently or occasionally.
IPS	Acronym of Internet Protocol Suite, the suite of network protocols on which the Internet works.
ISO 3166-1	Standard that provides codes for country names.
KSK	Acronym of Key Signing Key, it is a public/private key pair. The KSK private key is used to generate a digital signature for the ZSK (Zone Signing Key). The KSK public key is stored in the DNS to be used to authenticate the ZSK.

Login	Authentication procedure via username and password. In the EPP protocol it corresponds to a specific command to begin a work session.
Maintenance	Automatic renewal of a domain name registered in the DBAN.
Multistatus	Combination of more than one status associated with a domain name or contact.
MX Record	Acronym of Mail eXchange, resource record that indicates which are the servers that manage the email for a certain domain name.
NS Record	Acronym of Name Server, resource record that indicates which are the authoritative nameservers for a certain domain name.
Name server / Nameserver / Host	Server that translates a network address in textual format into the corresponding numerical address. It is also known as DNS (Domain Name System). The nameserver can be subordinate or not subordinate to the associated domain name. For example, the nameserver ns.example.it is subordinate to the domain name example.it. In this document "host", "name server" and "nameserver" are equivalent and they are used to identify a generic nameserver.
Object	A set of data that identifies an element (Domain, Registrant, Contact, Registrar) inside the DBAN.
Parsing	Subdivision of the instructions of a program into their various components so that they can be interpreted by the compiler and transformed into executable commands.
Polling queue	The queue of all the messages that the client receives from the server. By querying their polling queue, Registrars can see some messages related to domain names (actions started, currently under way, or concluded on a given domain name), authentication and credit level.
Protocol	Set of rules and conventions followed both in the transfer and in the receipt of data between two computers.
Query	Queries to the nameserver.
RAIN-NG	Acronym of Registrar Advanced INterface Next Generation. It is a portal for Registrars only.
Random time	Time period in which an event occurs in a random way.
Reason for error	Reasons for error used by the Registry's synchronous server.
Record	Data structure, logically connected, that contains a set of fields that can be identified by a number or a name.
Redemption period	The 30 (thirty) days after the request for cancellation of a domain name by the Registrar.
Resource Records (RRs)	Records containing information about a certain DNS zone. There are several types of resource records such as SOA, NS, MX, etc..
Referring	For contact objects, it indicates the correspondence between them and the ID contacts present in other objects in the DBAN.
REG tag	Registrar tag.
Registrant	Person or organization that requests the registration of a domain name or who has already been assigned one.
Registrar	Organizations that carry out registrations of domain names on behalf of themselves or the Registrants, according to the "Rules for assignment and management of domain names under the ccTLD .it". In order to become Registrar, an organization must pass an accreditation procedure arranged by the Registry and must have the proper technical infrastructure.
Registration	Entering of a new domain name or contact into the DBAN.
Registry	Organization responsible for assigning domain names, managing the registries and the primary nameservers for a TLD. It is delegated to this task directly by ICANN. In this document, .it Registry and Registry of the ccTLD .it are equivalent.
Registry Database	Database maintained by the .it Registry, where all data relating to domain names assigned in the ccTLD .it are stored and managed.

RFC	Acronym of Request For Comments, it is the document that gives specifics regarding new research, innovation and methodologies in computer science and the Internet.
RR	Acronym of Resource Record, it contains information about a certain DNS zone. There are several types of resource records such as SOA, NS, MX, etc..
RRset	Acronym of Resource Record set, a set of resource records (RR) of the same type.
RRSIG Record	Acronym of Resource Record Signature, resource record defined by the DNSSEC containing a cryptographic signature for a set of resource records of the same type (RRset).
Server	Computer in a network that sends files to other computers in the network and that executes applications on their behalf.
SLD	Acronym of Second Level Domain, it is the tag that uniquely identifies the second level in the name space tree of Internet domain names directly under a TLD.
SMTP	Acronym of Simple Mail Transfer Protocol, protocol for exchanging email in a TCP/IP network.
SOA Record	Acronym of Start Of Authority, the resource record that defines the machine on which the primary nameserver is active for the domain name and some "working parameters" of the secondary nameservers.
SSL	Acronym of Secure Sockets Layer, a cryptographic protocol that allows secure communication between two points in the network.
Stateful	In application protocols, such as EPP, it refers to the status of the communication session.
Status	A status characterizes the current operational condition of an object and its possible future transitions.
sTLD	Acronym of sponsored Top Level Domain - the gTLDs managed by a sponsor that represents the community and which proves to have an affinity with it. The organization to which is delegated specific responsibilities regarding the management of a Registry in a sTLD, for example in policy formuation regarding the operations of the TLD. An sTLD has a Charter approved by ICANN that defines its purpose and how the TLD must be managed.
Subordinate nameserver	A nameserver is defined subordinate to a given domain name if it belongs to the zone of the domain name itself. For example, the nameserver ns.example.it is subordinate to the domain name example.it.
Tag	Also used to name the code that marks the beginning and end of the entity in the said languages, e.g. HTML, SGML and XML.
TLD	Acronym of Top Level Domain. Univocal identifier of the suffix of a tree of Internet domain names, immediately under the root, and thus also known as "First Level Domains".
Update	Update operation.
URI	Acronym of Uniform Resource Identifier, a string that univocally identifies a generic resource e.g. web address, document, image, file, service, email address. An URL is a URI, more commonly known as a web address.
URL	Acronym of Universal Resource Locator, web page address, that is the address for a page in alphabetic format. The URL is transformed into an IP address by the DNS.
UTC	Acronym of Universal Time Coordinated (from the French Temps Universel Coordonné), known also as civil time, it is the reference time zone from which all the other time zones in the world are calculated. It coincides with the GMT (Greenwich Mean Time) with less infinitesimals.

uTLD	Acronym of unsponsored Top Level Domain, gTLDs that are not sponsored, e.g. ".com" or ".info". They work directly following policies established by the global internet community and more specifically by ICANN.
Working days	From Monday through to Friday, excluding public holidays.
XML	Acronym of eXtensible Markup Language, a meta language for creating mark up languages for exchanging data between websites and applications that may be based on different systems. A mark up language uses particular markers (tags) to indicate the function of the various parts of the code (e.g. <tag attributes>content</tag>).
XML schema	The only language describing the content of an XML file that has reached the official (1.1) validation of the W3C.
Zone of the ccTLD.it	DNS master file of the ccTLD .it in which all the active delegations in the ccTLD .it are inserted.
ZSK	Acronym of Zone Signing Key, is a public/private key pair. The ZSK private key is used to generate a digital signature, known as RRSIG, for each of the resource record sets (RRset) in a zone. The ZSK public key is stored in the DNS (DNSKEY record) to authenticate an RRSIG.