



Consiglio Nazionale delle Ricerche

The EPP server of the .it Registry: main features and functionalities

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Table of contents

1. Introduction.....	1
2. Preconditions for interacting with the EPP server	1
2.1 Credentials	1
2.2 IP addresses.....	1
2.3 Limits on commands	2
2.4 Credit	2
2.5 HTTPS connection	2
2.6 EPP session	3
2.7 XML Schemas.....	4
2.8 Return codes.....	5
2.9 Reasons for errors.....	7
2.3 Date format	23
2.4 Statuses of the synchronous system	23
3. Commands for managing the session	24
3.1 Hello	24
3.1.1 Request.....	24
3.1.2 Response	25
3.2 Login.....	25
3.2.1 Request.....	26
3.2.2 Request (login with new password).....	26
3.2.3 Response (without enqueued message - operation charges not activated)	27
3.2.4 Response (without enqueued message - operation charges activated)	27
3.2.5 Response (with enqueued message - operation charges not activated)	27
3.3 Logout.....	28
3.3.1 Request.....	28
3.3.2 Response	28
4. Commands for querying the server	29
4.1 Querying Contact objects	29
4.1.1 Check Contact	29
4.1.1.1 Request.....	29
4.1.1.2 Response.....	29
4.1.2 Info Contact.....	30
4.1.2.1 Request.....	30
4.1.2.2 Response (on Contact does NOT exist)	30
4.1.2.3 Response (on Contact not belonging to registrar)	31
4.1.2.4 Response (on tech Contact belonging to registrar).....	31
4.1.2.5 Response (on registrant Contact belonging to registrar).....	32
4.2 Querying Domain objects	33
4.2.1 Check Domain.....	33
4.2.1.1 Request.....	33
4.2.1.2 Response.....	34
4.2.2 Info Domain	35
4.2.2.1 Request (by registrar who owns the domain – without AuthInfo)	35
4.2.2.2 Request (by registrar who does NOT own the domain but who has AuthInfo)	35

4.2.2.3 Response (on Domain does NOT exist).....	35
4.2.2.4 Response (on Domain belonging to registrar, or of which registrar has AuthInfo) ..	36
4.2.2.5 Response (on Domain just transferred with the presence of duplicate contacts and containing date of transfer)	37
4.2.2.6 Response (on Domain in inactive/dnsHold).....	38
4.2.3 Transfer Query Domain	40
4.2.3.1 Request.....	40
4.2.3.2 Response (the domain is NOT in pending transfer nor has it ever been subject to transfer).....	41
4.2.3.3 Response (the querying registrar neither owns the domain nor has requested transfer).....	41
4.2.3.4 Response (the domain is in pendingTransfer)	42
4.2.3.5 Response (the most recent transfer requested on the domain has been approved by the previous registrar and terminated successfully)	42
4.2.3.6 Response (the domain is pendingTransfer, at the same time as the transfer a change of registrant has also been requested, the request for Transfer Query has been submitted by the registrar who issued the Transfer Request with “trade” extension)	43
4.2.3.7 Response (the domain is in pendingTransfer, at the same time as the transfer a change of registrant has been requested, the request for Transfer Query has been submitted by the registrar that manages the domain)	44
4.3 Polling.....	45
4.3.1 Request (op = req)	45
4.3.2 Response (op = req – message that password is about to expire)	45
4.3.3 Response (op = req – message reporting that the validation of the DNS configuration of the domain terminated unsuccessfully)	46
4.3.4 Response (op = req – status change message following elaboration from a client or following an event - in this case following a cancellation request and consequent transition of the domain in the redemption period)	49
4.3.5 Response (op = req – message reporting that the validation of the DNS configuration of the domain terminated successfully with warning).....	50
4.3.6 Response (op = req – simple notification message on an event in a domain - in this case the domain has been deleted).....	50
4.3.7 Response (op = req – delegation interruption message following the deletion of a domain superordinated of the name server associated with other domains).....	51
4.3.8 Response (op = req – domain transfer request message by the registrar “MARIO-LOFFREDO” that carried out a Domain Transfer “op=request” – the message is in the polling queue of the registrar “DEMO-REGISTRAR” that manages the domain).....	51
4.3.9 Response (op = req – domain transfer request message cancelled by the registrar “MARIO-LOFFREDO” with a Domain Transfer “op=cancel” – the message is in the polling queue of the registrar “DEMO-REGISTRAR” that manages the domain).....	52
4.3.10 Response (op = req – transfer request message refused by the registrar “DEMO-REGISTRAR” with a Domain Transfer “op=reject” – the message is in the polling queue of the registrar “MARIO-LOFFREDO” who previously made the transfer request).....	53
4.3.11 Response (op = req – domain transfer message request approved by the registrar “DEMO-REGISTRAR” with a Domain Transfer “op=approve” – the message is in the polling queue of the new registrar “MARIO-LOFFREDO” and, with a different svTRID, in the polling queue of the old registrar “DEMO-REGISTRAR”)	53
4.3.12 Response (op = req – domain transfer message request approved by the server for the expiry of the pendingTransfer period – the message is in the polling queue of the new registrar “MARIO-LOFFREDO” and, with a different svTRID, in the polling queue of the old registrar “DEMO-REGISTRAR”).....	54

4.3.13 Request (op = ack).....	55
4.3.14 Response (op = ack).....	55
4.3.15 Response (op = req messages not present in queue)	55
4.3.16 Response (op = ack messages not present in queue).....	56
4.3.17 Messages that do not regard the domains	56
4.3.18 Messages that regard the domains	57
4.3.19 Correspondence between messages and schemas	66
4.3.20 Email to Registrant	69
4.3.20.1 Registration of a new domain name – Notification to the Registrant.....	69
4.3.20.2 Change of the Registrant – Notification to the old Registrant	70
4.3.20.3 Domain passed to the state ok/noRegistrar – Notification to the Registrant	71
4.3.20.4 Domain passed to the state inactive/noRegistrar – Notification to the Registrant ..	71
5. Commands for changing the status of Contact and Domain	72
5.1 Creating and changing Contact objects	72
5.1.1 Create Contact	72
5.1.1.1 Request (creation of Tech or Admin*)	72
5.1.1.2 Request (creating a Registrant contact)	73
5.1.1.3 Response (creation of a contact terminated successfully).....	74
5.1.1.4 Response (creation of Registrant with incorrect tax code)	75
5.1.2 Update Contact.....	75
5.1.2.1 Request (telephone number change).....	75
5.1.2.2 Request (addition of clientUpdateProhibited constraint – it will not be possible to make any changes other then the removal of the constraint itself)	76
5.1.2.3 Request (change of consentForPublishing of a contact).....	76
5.1.2.4 Response (change requested not possible due to clientUpdateProhibited constraint)77	
5.1.2.5 Response (change of removal of constraint not possible because constraint is NOT associated with the Contact)	77
5.1.2.6 Response (change not possible because the registrar does not sponsor the Contact) 78	
5.1.2.7 Response (change executed).....	78
5.1.3 Delete Contact	79
5.1.3.1 Request.....	79
5.1.3.2 Response (cancellation not possible because Contact is associated with some domains).....	79
5.2 Creating and changing Domain objects.....	80
5.2.1 Create Domain.....	80
5.2.1.1 Request (creation of a domain with subordinated nameservers *)	80
5.2.1.2 Response (the domain has been created and put in DnsHold while waiting for DNS configuration to be validated)	81
5.2.1.3 Response (creation of a domain with a registrant which has not been created as a registrant)	81
5.2.1.4 Request (creation of a domain with non subordinated nameservers)	82
5.2.1.5 Request (creation of a domain by breaking the constraint “if Registrant is type 1 then must coincide with the contact Admin”)	83
5.2.1.6 Response (creation of a domain breaking constraint “Registrant of type 1 must coincide with the contact Admin”).....	83
5.2.2 Update Domain.....	84
5.2.2.1 Request (change registrant)	85
5.2.2.2 Request (change registrant and admin at same time).....	86
5.2.2.3 Response (change type 1 registrant not possible because a new admin that is not type 1 has been specified at the same time)	86

5.2.2.4 Response (removal of contact not executed because the contact is not associated with the domain)	87
5.2.2.5 Request (removal of a name server)	87
5.2.2.6 Response (removal of a name server failed because the number of name servers would be insufficient).....	88
5.2.2.7 Request (removal of a name server in use at same time as addition of a new name server)	88
5.2.2.8 Request (change to IP addresses of a name server)	89
5.2.2.9 Response (removal of a name server in use at same time as addition of new name sever - the operation is completed but pending because the DNS Check on the added name sever is being carried out).....	90
5.2.2.10 Request (addition of a status without an associated message)	90
5.2.2.11 Response (addition of a status without an associated message).....	91
5.2.2.12 Request (addition of a status with an associated message)	91
5.2.2.13 Request (removal of a status)	92
5.2.2.14 Response (removal of a status).....	92
5.2.2.15 Request (restore a domain).....	93
5.2.2.16 Risposta (restore a domain).....	94
5.2.3 Delete Domain.....	94
5.2.3.1 Request.....	94
5.2.3.2 Response.....	95
5.2.4 Transfer Domain.....	95
5.2.4.1 Request (op = request by registrar different from the sponsoring one)	96
5.2.4.2 Response (op = request).....	96
5.2.4.3 Request (op = reject by sponsoring registrar of a domain that is undergoing a request for transfer, the reuest is sent to deny the transfer)	97
5.2.4.4 Response (op = reject).....	97
5.2.4.5 Request (op = cancel by registrar that previously made the Transfer Request op = request)	98
5.2.4.6 Response (op = cancel)	98
5.2.4.7 Request (op = approval by old registrar to accept transfer)	99
5.2.4.8 Response (op = approve).....	99
5.2.5 Transfer-Trade Domain	100
5.2.5.1 Request (op = request by registrar different from the sponsoring one)	100
5.2.5.2 Response (op = request).....	101
5.2.6 Pending actions.....	102
5.2.7 Periods	102
5.2.8 Other useful parameters	103

1. Introduction

This document outlines a method for the various registries for implementing their EPP client so that it interacts correctly with the synchronous server of the Italian registry.

There are three categories of such EPP commands. Commands for:

- managing sessions (login, logout, hello)
- querying the server without modifying the status of the Contact and Domain objects
- for modifying the status of the Contact and Domain objects

For each command you will see an example of a request and how the server responds. There are also some examples of responses to errors for cases where the EPP command has not been correctly submitted or submitted in a status in which the command itself is not permitted.

2. Preconditions for interacting with the EPP server

2.1 Credentials

In order to interact with the EPP server of the Registry, the registrar must have the following information which has been provided by the registry, by email, following the registrar request to access the test environment:

- URL of the open test EPP server (**<https://pub-test.nic.it> - default port 443**)
- URL of the open test EPP server dedicated to the registration requests of the domain names deleted less than 7 days ago (**<https://epp-deleted-pub-test.nic.it> - default port 443**)
- URL of the open test RAIN-NG portal (**<https://rain-ng-pub-test.nic.it> - default port 443**)
- URL of the open test Whois service (**whois-pub-test.nic.it - port 43**);
- URL of the open test DAS service (**das-pub-test.nic.it - port 4343**).
- address of EPP server
- login name (**clid** field)
- login password (**pw** field). The password could be changed and it lasts 180 days. Starting from 15 days before the expiring date, the EPP server will insert in your polling queue a reminding message. The password, according to the EPP protocol, should have a minimum length of 6 chars and a maximum length of 16 chars.

To access the epp-deleted-pub-test.nic.it server, the registrars must use the same credentials used for the pub-test.nic.it server. Both servers operates on the same database.

2.2 IP addresses

Before opening the first connection to the EPP servers, the registrar should have set the physical address of the machines that will host its EPP clients.

By accessing the RAIN-NG portal, the registrar will be able to add, change and remove the IP addresses enabled to access the EPP test server.

2.3 Limits on commands

The query operations on domain names (Check and Info), the interrogation of the polling queue and all the operations on the contacts, are available on both servers.

In order to test the cancellation operations of a domain name and its successive registration on the new epp-deleted-pub-test.nic.it server, the duration periods of a domain name in the pendingDelete/redemptionPeriod and pendingDelete/pendingDelete statuses, have been modified. In the first case, the domain name remains in pendingDelete/redemptionPeriod status until the day corresponding to the date of receipt of a Delete Domain request processed with success. In the second case, the duration time of a domain name in pendingDelete/pendingDelete status has been set at zero and the deletion of the domain name is nearly immediate.

Concerning the number of Check Domain and Create Domain commands, some limits have been set. In particular, each Registrar will have the possibility of sending up to:

- 6000 Check Domain commands a day to the server pub-test.nic.it;
- 3000 Check Domain commands a day to the server epp-deleted-pub-test.nic.it;
- 3000 Create Domain commands a day to the epp-deleted-pub-test.nic.it;

The aforementioned limits coincide with those of the real servers.

2.4 Credit

The initial credit is 0 Euro so if the registrar want to submit invoiceable operations it has to recharge its credit.

By accessing the RAIN-NG portal, it will be able to:

- recharge the credit by means of a deposit(minimal value 50€ - maximum value 500€);
- check the status of the deposits made and related invoices;
- check of the available credit
- set and update a personal Credit Threshold. If the credit goes under the personal credit threshold, the EPP server will insert a special message in the polling queue. Such a message has no relation with the other messages that the EPP server inserts in the polling queue whenever the registrar credit goes under the threshold computed according to the number of domains that will expire in the following 15 days.

It is therefore required to fill in the relevant form available on RAIN-NG and send the obtained PDF file via email to the address test-epp@ nic.it.

The payment made is not real! During test phase NO real payment is required.

Upon receipt of the document, the Registry will credit to the Registrar the amount desired and issue a facsimile invoice, that the Registrar will have the possibility of visualizing on the RAIN-NG portal.

2.5 HTTPS connection

The client of the registrar must be able to establish a HTTPS connection to the server by using the *trusted.keystore* certificate which can be extracted from the zip file of the EPP client library provided by the Registry.

2.6 EPP session

EPP is an applicative protocol with session (stateful). In the implementation of italian registry, it is based upon the HTTPS protocol which viceversa is without session (stateless).

To allow that the EPP commands are submitted within a session, the server generates and inserts in the Login response a session identifier (JSESSIONID).

Such an identifier is returned in the response cookie.

Therefore the EPP clients should be enabled to deal with cookie and should use the session identifier returned in the Login response for the following EPP commands till the Logout request.

The Hello command is the only one that can be sent out of the scope of a Login-Logout session. If the registrar wants to periodically submit the Hello command to keep a session alive, it should use a session identifier generated previously for the session otherwise the session will expire due to timeout expiration.

The EPP server does not accept Login or Hello (if it is submitted out of the scope of an opened session) that contain a session identifier already set.

In the following, it is reported an example of a Login response with a session identifier created by the server and identified by the JSESSIONID parameter within the cookie.

The example has been realized by using the tool Poster of Mozilla FireFox. The URL of the local EPP server has been deliberately obfuscated.

Response

POST on http:
Status: 200 OK

```
<?xml version="1.0" encoding="UTF-8"?>
<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">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <msgQ count="21" id="147063">
      <qDate>2009-10-09T19:34:00+02:00</qDate>
      <msg lang="en">Domain transfer is expired: transfer has been executed</msg>
    </msgQ>
    <extension>
      <extepp:creditMsgData xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-1.0"
xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extepp-1.0 extepp-1.0.xsd">
        <extepp:credit>154.200</extepp:credit>
      </extepp:creditMsgData>
    </extension>
    <trID>
      <svTRID>FR1660317716</svTRID>
    </trID>
  </response>
</epp>
```

Headers:

Date	Tue, 20 Oct 2009 07:27:47 GMT
X-Powered-By	Servlet 2.4; JBoss-4.2.3.GA (build: SVNTag=JBoss_4_2_3_GA date=200807181439)/JBossWeb-2.0
Set-Cookie	JSESSIONID=CA1E342F22796BD51C0E5496BFE246C7; Path=/
Pragma	no-cache
Cache-Control	no-cache
Expires	0
Content-Language	en
Content-Type	text/xml; charset=UTF-8
Vary	Accept-Encoding
Content-Encoding	gzip
Content-Length	438
Keep-Alive	timeout=15, max=100
Connection	Keep-Alive

Close

2.7 XML Schemas

The client must support the following XML Schemas:

- ***epp-1.0.xsd*** : Extensible Provisioning Protocol v1.0 schema
- ***domain-1.0.xsd*** : Extensible Provisioning Protocol v1.0 domain provisioning schema
- ***contact-1.0.xsd*** : Extensible Provisioning Protocol v1.0 contact provisioning schema
- ***eppcom-1.0.xsd*** : Extensible Provisioning Protocol v1.0 shared structures schema
- ***rgp-1.0.xsd*** : Extensible Provisioning Protocol v1.0 domain name extension schema for registry grace period processing
- ***extepp-1.0.xsd*** : IT-NIC Extensible Provisioning Protocol v1.0 EPP extension.
- ***extcon-1.0.xsd*** : IT-NIC Extensible Provisioning Protocol v1.0 domain extension
- ***extdom-1.0.xsd*** : IT-NIC Extensible Provisioning Protocol v1.0 contact extension

2.8 Return codes

The registrar must know the return codes of commands submitted by a client to the EPP server. The codes and their 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 modified 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 an element (or a value of an element) inserted in 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.

2.9 Reasons for errors

The registrar must know the reasons of error used by the EPP server of the Italian Registry. The reasons further specify the return codes.

The reasons are divided up by category:

- Reasons \geq 4000 : generic errors
- Reasons \geq 5000 : session errors
- Reasons \geq 6000 : accounting errors
- Reasons \geq 7000 : errors regarding the DNS configuration proposed in the Create Domain and Update Domain commands
- Reasons \geq 8000 : Contact object errors
- Reasons \geq 9000 : Domain object errors

The meanings of each reason is established by the Italian Registry and are subject to change.

(2001=**Command syntax error** 4003=**<The syntax error message coming form 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 a opened session.

(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

(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 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 a command Update Domain of a domain 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 non 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 domains 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 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 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 9020=Unsupported transfer option):

Response to a command Domain Transfer whose execution fails because the option requested does NOT exist.

(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 4008=Unsupported object URI):

Response to a Login command whose execution fails because the value of <objURI> element is unsupported

(2102=Unimplemented option 4008=Unsupported extension URI):

Response to a Login command whose execution fails because the value of <extURI> element is unsupported

(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 domains 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.

(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 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.

(2200=Authentication error 6002=Object does non 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 a command Info Contact whose execution fails because the contact requested in the command does NOT belong to the current registrar even if the registrar has specified an authInfo.

(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 that belongs to another registrar without specifying the AuthInfo.

(2202=Invalid authorization information 9002=Invalid domain authorization information):

Response to a command that acts on a domain whose execution fails due to the lack of correspondence between the AuthInfo associated with the domain and that inserted in the command.
Example: execution of the command Info Domain on a domain that belongs to another registrar specifying incorrect AuthInfo.

(2301=Object not pending transfer 9054=Domain transfer not pending):

Response to a command Transfer Domain (op=query) whose execution fails because the domain specified in the query has NEVER been involved in a transfer.

(2302=Object exists 8058= Contact is registered in the asynchronous system already exists):

Response to a command Create Contact whose execution fails because the contact specified already exists.

(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.

(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 domain is not available.

(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 domain is not available.

(2302=Object exists 9084=Domain is registrered 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.

(2303=Object exists 9021=Domain is reserved):

Response to a command Create Domain whose execution fails because the domain is reserved. This reason is used also in the Check Domain response when domain is not available.

(2303=Object does not exist 9036=Domain does not exist):

Response to a command that refers to a domain does NOT exist.
Example: execution of an Info Domain.

(2303=Object exists 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 domain is not available.

(2303=Object exists 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 domain 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.

(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 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 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 registrant of a domain (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 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 domains.

(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 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.

(2306=Parameter value policy error 9008=Zone is not managed by the system):

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 with the same two technical contacts.

(2308=Data management policy violation 5050=Command limit exceeded):

Response to a command whose execution fails because the limit of #comandi/unità of time defined by the system policy has been passed.

(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=At least one v4 IP address for this host is required):

Response to a command Create/Update Domain whose execution fails because at least one IP v4 address has NOT been specified for a name server.

(2308=Data management policy violation 7009=IP V6 address currently unsupported):

Response to a command Create/Update Domain whose execution fails because one IP v6 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 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 country 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.

(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.

(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.

(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.

(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.

(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.

(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 changes between any two of the following: status, name server and 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 command Create/Update Domain whose execution fails because the nameserver to associate is subordinate for the domain and has no IP address 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-pub-test.nic.it for test environment)):

Response to a command Create Domain whose execution fails because the domain name to create is deleted less than 7 days ago and the request has been sent to epp.nic.it (or pub-test.nic.it for test environment).

(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 whose execution fails because the request references a contact with uncompleted data. The contact has been migrated from the asynchronous 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):

Response to any command requested on a domain whose execution fails because the request references a registrant with uncompleted data. The registrant has been migrated from the asynchronous 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 domain name to create is NOT deleted less than 7 days ago and the request has been sent to epp-deleted.nic.it (epp-deleted-pub-test.nic.it for test environment).

(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 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.

2.3 Date format

The format of the date of the responses from the server is as follows:

yyyy-MM-dd'T'HH:mm:ss+<offset>

The date is the local date, while <offset> is the difference in hours with respect to the UTC date and can thus have the following values:

- **+01:00** – when daylight saving time is NOT in operation
- **+02:00** – when daylight saving time is in operation

2.4 Statuses of the synchronous system

In the EPP protocol, both domains and contacts are always associated to a state that is a combination of more statuses.

In the implementation of the Italian Registry EPP server, the statuses belongs to three categories each one referring a different XML Schema:

- EPP protocol standard statuses for the domain object defined in the domain-1.0.xsd XML Schema:

```
clientDeleteProhibited
clientHold
clientTransferProhibited
clientUpdateProhibited
inactive
ok
pendingDelete
pendingTransfer
pendingUpdate
serverDeleteProhibited
serverHold
serverTransferProhibited
serverUpdateProhibited
```

- RGP protocol extension statuses for the domain object defined in the rgp-1.0.xsd XML Schema. These statuses has been added to treat grace periods. Grace period policies exist to allow protocol actions to be reversed or otherwise revoked during a short period of time after the protocol action has been performed. In the implementation of the Italian Registry EPP server, only two grace periods are considered:
 - **autoRenewPeriod**: after a domain name registration period expires and is extended (renewed) automatically by the registry
 - **rdemptionPeriod**: after a domain name is deleted before a domain name is purged from the repository of the authoritative registry:

```
autoRenewPeriod
pendingDelete
redemptionPeriod
```

- Italian Registry protocol extension statuses for the domain object defined in the extdom-1.0.xsd XML Schema. These statuses has been added to deal with specific aspects of the Italian Registry:

```
challenged
dnsHold
noRegistrar
revoked
toBeReassigned
notRenewed
bulk
```

The combination of statuses contains always one or more statuses belonging to the domain-1.0.xsd plus, if there are, statuses belonging to rgp-1.0.xsd and/or extdom-1.0.xsd. The combination of statuses will be reported according to the notation <status 1>/<status 2>...../<status N>. The statuses belonging to the extensions will be presented in *italic*.

For what concerns the contact object, Per quanto riguarda l'oggetto Contact, in the implementation of the Italian Registry EPP server, the statuses are defined in the contact-1.0.xsd XML Schema. No extensions has been added:

```
clientDeleteProhibited
clientUpdateProhibited
linked
ok
serverDeleteProhibited
serverUpdateProhibited
```

Since contact objects cannot be transferred and both the update and delete operations are executed immediately, no pending statuses are used.

3. Commands for managing the session

3.1 Hello

3.1.1 Request

```

<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
<hello/>
</epp>

```

3.1.2 Response

```

<?xml version="1.0" encoding="UTF-8" ?>
- <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">
- <greeting>
  <svID>NIC-IT EPP Registry</svID>
  <svDate>2008-02-22</svDate>
- <svcMenu>
  <lang>en</lang>
  <lang>it</lang>
  <version>1.0</version>
  <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-1.0</extURI>
  <extURI>http://www.nic.it/ITNIC-EPP/extcon-1.0</extURI>
  <extURI>http://www.nic.it/ITNIC-EPP/extdom-1.0</extURI>
  <extURI>urn:ietf:params:xml:ns:rgp-1.0</extURI>
</svcExtension>
</svcMenu>
- <dcp>
- <access>
  <all />
</access>
- <statement>
- <purpose>
  <admin />
  <prov />
</purpose>
- <recipient>
- <ours>
  <recDesc />
</ours>
  <public />
</recipient>
- <retention>
  <stated />
</retention>
</statement>
</dcp>
</greeting>
</epp>

```

3.2 Login

The response to the Login of the production server will contain the registrar's current credit. This extension will not be present for the free test version of the EPP server which does not allow the activation of charging for operations and also for the EPP server it is used for the accreditation test.

3.2.1 Request

```
<?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-1.0</extURI>
<extURI>http://www.nic.it/ITNIC-EPP/extcon-1.0</extURI>
<extURI>http://www.nic.it/ITNIC-EPP/extdom-1.0</extURI>
<extURI>urn:ietf:params:xml:ns:rgp-1.0</extURI>
</svcExtension>
</svcs>
</login>
</command>
</epp>
```

3.2.2 Request (login with new password)

```
<?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>axc3y10</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-1.0</extURI>
<extURI>http://www.nic.it/ITNIC-EPP/extcon-1.0</extURI>
<extURI>http://www.nic.it/ITNIC-EPP/extdom-1.0</extURI>
<extURI>urn:ietf:params:xml:ns:rgp-1.0</extURI>
</svcExtension>
</svcs>
</login>
```



```
</command>
</epp>
```

3.2.3 Response (without enqueued message - operation charges not activated)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <trID>
      <svTRID>DE2377442201</svTRID>
    </trID>
  </response>
</epp>
```

3.2.4 Response (without enqueued message - operation charges activated)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <extension>
      <extepp:creditMsgData xmlns:extepp="http://www.nic.it/ITNIC-
        EPP/extepp-1.0"
        xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extepp-1.0
        extepp-1.0.xsd">
        <extepp:credit>48739.112</extepp:credit>
      </extepp:creditMsgData>
    </extension>
    <trID>
      <svTRID>DE4605050674</svTRID>
    </trID>
  </response>
</epp>
```

3.2.5 Response (with enqueued message - operation charges not activated)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1000">
```

```

    <msg lang="en">Command completed successfully</msg>
  </result>
  <msgQ count="1" id="227">
    <qDate>2008-02-21T14:20:00+01:00</qDate>
    <msg lang="en">DNS check ended successfully</msg>
  </msgQ>
  <trID>
    <svTRID>DE2377442201</svTRID>
  </trID>
</response>
</epp>

```

The msgQ section is always in the responses of the messages presented in the following samples as there is at least one message in the message queue for the registrar.

3.3 Logout

3.3.1 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/>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>

```

3.3.2 Response

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="1500">
  <msg lang="en">Command completed successfully; ending
  session</msg>
  </result>
= <msgQ count="1" id="227">
  <qDate>2008-02-21T14:20:00+01:00</qDate>
  <msg lang="en">DNS check ended successfully</msg>
  </msgQ>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE6734504440</svTRID>
  </trID>
</response>
</epp>

```

4. Commands for querying the server

4.1 Querying Contact objects

4.1.1 Check Contact

4.1.1.1 Request

```
<?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 Response

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <msgQ count="1" id="227">
      <qDate>2008-02-21T14:20:00+01:00</qDate>
      <msg lang="en">DNS check ended successfully</msg>
    </msgQ>
    <resData>
      <contact:chkData 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:cd>
          <contact:id avail="false">MM001</contact:id>
        </contact:cd>
        <contact:cd>
          <contact:id avail="false">MB001</contact:id>
        </contact:cd>
        <contact:cd>
        </contact:cd>
      </contact:chkData>
    </resData>
  </response>
</epp>
```

```

        <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>DE7512242614</svTRID>
</trID>
</response>
</epp>

```

4.1.2 Info Contact

4.1.2.1 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 Response (on Contact does NOT exist)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
  = <response>
    = <result code="2303">
      <msg lang="en">Object does not exist</msg>
    = <value>
      <id xmlns:domain="urn:ietf:params:xml:ns:contact-1.0">MISSING001</id>
    </value>
    = <extValue>
      = <value>
        <reasonCode xmlns="">9003</reasonCode>
      </value>

```

```

        <reason lang="en">Contact does not exist</reason>
    </extValue>
</result>
= <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>DE2512246177</svTRID>
</trID>
</response>
</epp>

```

4.1.2.3 Response (on Contact not belonging to registrar)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="2201">
    <msg lang="en">Authorization error</msg>
    = <extValue>
        = <value>
            <reasonCode xmlns="">6001</reasonCode>
        </value>
        <reason lang="en">Lack of permissions to process
            command</reason>
    </extValue>
</result>
= <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>DE4163604401</svTRID>
</trID>
</response>
</epp>

```

4.1.2.4 Response (on tech Contact belonging to registrar)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="1000">
    <msg lang="en">Command completed successfully</msg>
</result>
= <msgQ count="1" id="227">
    <qDate>2008-02-21T14:20:00+01:00</qDate>
    <msg lang="en">DNS check ended successfully</msg>
</msgQ>
= <resData>
    = <contact:infData 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>TECH001</contact:id>
    </contact:infData>
</resData>

```

```

<contact:roid>ITNIC-8</contact:roid>
<contact:status s="ok" lang="en" />
<contact:status s="linked" lang="en" />
= <contact:postalInfo type="loc">
  <contact:name>Marco Bertoli</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 1234</contact:voice>
<contact:fax x="">+39.058375124</contact:fax>
<contact:email>marco.bertoli@hotmail.it</contact:email>
<contact:clID>DEMO-REGISTRAR</contact:clID>
<contact:crID>DEMO-REGISTRAR</contact:crID>
<contact:crDate>2008-02-
  19T14:46:35+01:00</contact:crDate>
<contact:upID>DEMO-REGISTRAR</contact:upID>
<contact:upDate>2008-02-
  21T14:35:51+01:00</contact:upDate>
</contact:infData>
</resData>
= <extension>
  = <extcon:infData 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:infData>
</extension>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE0541652374</svTRID>
</trID>
</response>
</epp>

```

4.1.2.5 Response (on registrant Contact belonging to registrar)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
  = <response>
    = <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
  = <resData>
    = <contact:infData 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:roid>ITNIC-24</contact:roid>
<contact:status s="ok" lang="en" />
<contact:status s="linked" lang="en" />
= <contact:postalInfo type="loc">
  <contact:name>Maurizio Martinelli</contact:name>
  <contact:org> Maurizio Martinelli</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="">+39.0503153497</contact:voice>
<contact:fax x="">+39.0503153498</contact:fax>
<contact:email>maurizio.martinelli@iit.cnr.it</contact:email>
<contact:clID>DEMO-REGISTRAR</contact:clID>
<contact:crID>DEMO-REGISTRAR</contact:crID>
<contact:crDate>2008-02-
  27T11:28:32+01:00</contact:crDate>
<contact:upID>DEMO-REGISTRAR</contact:upID>
<contact:upDate>2008-02-
  29T12:28:22+01:00</contact:upDate>
</contact:infData>
</resData>
= <extension>
  = <extcon:infData 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>MRTMRZ64R15B5090</extcon:regCode>
  </extcon:registrant>
</extcon:infData>
</extension>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>MA7242504661</svTRID>
</trID>
</response>
</epp>

```

4.2 Querying Domain objects

4.2.1 Check Domain

4.2.1.1 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>
<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>pippo1.it</domain:name>
<domain:name>pippo2.it</domain:name>
<domain:name>pluto.it</domain:name>
</domain:check>
</check>
<clTRID>ABC-12345</clTRID>
</command>
</epp>

```

4.2.1.2 Response

```

<?xml version="1.0" encoding="UTF-8" ?>
<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">
<response>
<result code="1000">
<msg lang="en">Command completed successfully</msg>
</result>
<msgQ count="1" id="227">
<qDate>2008-02-21T14:20:00+01:00</qDate>
<msg lang="en">DNS check ended successfully</msg>
</msgQ>
<resData>
<domain:chkData 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:cd>
<domain:name avail="false">pippo1.it</domain:name>
<domain:reason lang="en">Domain is
registered</domain:reason>
</domain:cd>
<domain:cd>
<domain:name avail="false">pippo2.it</domain:name>
<domain:reason lang="en">Domain is
registered</domain:reason>
</domain:cd>
<domain:cd>
<domain:name avail="true">pluto.it</domain:name>
</domain:cd>
</domain:chkData>
</resData>
<trID>
<clTRID>ABC-12345</clTRID>
<svTRID>DE5106741725</svTRID>
</trID>
</response>

```



```
</epp>
```

4.2.2 Info Domain

4.2.2.1 Request (by registrar who owns the domain – 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">pippo2.it</domain:name>
    </domain:info>
  </info>
  <clTRID>ABC-12345</clTRID>
</command>
</epp>
```

4.2.2.2 Request (by registrar who does NOT own the domain but who has 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">pippo2.it</domain:name>
      <domain:authInfo>
        <domain:pw>22fooBAR</domain:pw>
      </domain:authInfo>
    </domain:info>
  </info>
  <clTRID>ABC-12345</clTRID>
</command>
</epp>
```

4.2.2.3 Response (on Domain does NOT exist)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="2303">
  <msg lang="en">Object does not exist</msg>
  = <value>
    <name xmlns:domain="urn:ietf:params:xml:ns:domain-
      1.0">missing.it</name>
  </value>
  = <extValue>
    = <value>
      <reasonCode xmlns="">9036</reasonCode>
    </value>
    <reason lang="en">Domain does not exist</reason>
  </extValue>
</result>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE4442342340</svTRID>
</trID>
</response>
</epp>

```

4.2.2.4 Response (on Domain belonging to registrar, or of which registrar has AuthInfo)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="1000">
  <msg lang="en">Command completed successfully</msg>
</result>
= <msgQ count="1" id="227">
  <qDate>2008-02-21T14:20:00+01:00</qDate>
  <msg lang="en">DNS check ended successfully</msg>
</msgQ>
= <resData>
= <domain:infData 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>pippo2.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.pippo2.it</domain:hostName>
    <domain:hostAddr ip="v4">192.0.2.1</domain:hostAddr>
  </domain:hostAttr>
  <domain:hostAttr>

```

```

        <domain:hostName>ns2.pippo2.it</domain:hostName>
        <domain:hostAddr ip="v4">192.0.2.2</domain:hostAddr>
    </domain:hostAttr>
</domain:ns>
<domain:host>ns1.pippo2.it</domain:host>
<domain:host>ns2.pippo2.it</domain:host>
<domain:clID>DEMO-REGISTRAR</domain:clID>
<domain:crID>DEMO-REGISTRAR</domain:crID>
<domain:crDate>2008-02-
    21T15:18:12+01:00</domain:crDate>
<domain:upID>DEMO-REGISTRAR</domain:upID>
<domain:upDate>2008-02-
    21T15:21:08+01:00</domain:upDate>
= <domain:authInfo>
    <domain:pw>22fooBAR</domain:pw>
</domain:authInfo>
</domain:infData>
</resData>
= <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>DE5364020731</svTRID>
</trID>
</response>
</epp>

```

4.2.2.5 Response (on Domain just transferred with the presence of duplicate contacts and containing date of transfer)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="1000">
    <msg lang="en">Command completed successfully</msg>
</result>
= <msgQ count="3" id="226">
    <qDate>2008-02-21T14:15:00+01:00</qDate>
    <msg lang="en">DNS check ended successfully</msg>
</msgQ>
= <resData>
= <domain:infData 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>pippo2.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.pippo2.it</domain:hostName>
        <domain:hostAddr ip="v4">192.0.2.1</domain:hostAddr>
    </domain:hostAttr>
</domain:infData>
</resData>
</response>
</epp>

```

```

</domain:hostAttr>
  <domain:hostAttr>
    <domain:hostName>ns2.pippo2.it</domain:hostName>
    <domain:hostAddr ip="v4">192.0.2.2</domain:hostAddr>
  </domain:hostAttr>
</domain:ns>
<domain:host>ns1.pippo2.it</domain:host>
<domain:host>ns2.pippo2.it</domain:host>
<domain:clID>MARIO-LOFFREDO</domain:clID>
<domain:crID>DEMO-REGISTRAR</domain:crID>
<domain:crDate>2008-02-
  21T15:18:12+01:00</domain:crDate>
<domain:upID>MARIO-LOFFREDO</domain:upID>
<domain:upDate>2008-02-
  25T07:54:50+01:00</domain:upDate>
<domain:trDate>2009-02-
  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>MA5313310327</svTRID>
</trID>
</response>
</epp>

```

4.2.2.6 Response (on Domain in inactive/dnsHold)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="1000">
  <msg lang="en">Command completed successfully</msg>
</result>
= <msgQ count="18" id="2">
  <qDate>2008-07-03T16:06:06+02:00</qDate>
  <msg lang="en">DNS check ended unsuccessfully</msg>
</msgQ>
= <resData>
= <domain:infData 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>nic2.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>2008-07-
    04T13:03:15+02:00</domain:crDate>

```

```

<domain:exDate>2009-07-
04T23:59:59+02:00</domain:exDate>
<domain:upID>DEMO-REGISTRAR</domain:upID>
<domain:upDate>2008-07-
07T14:00:10+02:00</domain:upDate>
= <domain:authInfo>
  <domain:pw>22fooBAR</domain:pw>
</domain:authInfo>
</domain:infData>
</resData>
= <extension>
  = <extdom:infData xmlns:extdom="http://www.nic.it/ITNIC-
    EPP/extdom-1.0"
    xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0
    extdom-1.0.xsd">
    <extdom:ownStatus s="dnsHold" lang="en" />
  </extdom:infData>
  = <extdom:infNsToValidateData
    xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-1.0"
    xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0
    extdom-1.0.xsd">
  = <extdom:nsToValidate>
    = <domain:hostAttr
      xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
      <domain:hostname>dns.nic.it</domain:hostname>
    </domain:hostAttr>
    = <domain:hostAttr
      xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
      <domain:hostname>ns2.nic.it</domain:hostname>
    </domain:hostAttr>
    = <domain:hostAttr
      xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
      <domain:hostname>itgeo.mix-
        it.net</domain:hostname>
    </domain:hostAttr>
    = <domain:hostAttr
      xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
      <domain:hostname>nameserver.cnr.it
    </domain:hostname>
    </domain:hostAttr>
  </extdom:nsToValidate>
</extdom:infNsToValidateData>
</extension>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE6767446305</svTRID>
</trID>
</response>
</epp>

```

NOTE

The response can contain three 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-1.0.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.

4.2.3 Transfer Query Domain

The Transfer Query command can be submitted without the AuthInfo of the registrar that requires the transfer and from that which owns the domain until the domain is in pendingTransfer. When the transfer is terminated, successfully or unsuccessfully, only the registrar that owns the domain can issue the Transfer Query command without AuthInfo.

4.2.3.1 Request

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
  <domain:pw>2fooBAR</domain:pw>
<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>pippo1.it</domain:name>
        <domain:authInfo>
          </domain:authInfo>
        </domain:transfer>
      </transfer>
      <clTRID>ABC-12345</clTRID>
    </command>
  </epp>
```

4.2.3.2 Response (the domain is NOT in pending transfer nor has it ever been subject to transfer)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="2301">
      <msg lang="en">Object not pending transfer</msg>
      <value>
        <name xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">pippo2.it</name>
      </value>
      <extValue>
        <value>
          <reasonCode xmlns="">9054</reasonCode>
          </value>
          <reason lang="en">Domain transfer not pending</reason>
        </extValue>
      </result>
      <trID>
        <clTRID>ABC-12345</clTRID>
        <svTRID>DE2130570550</svTRID>
      </trID>
    </response>
  </epp>
```

4.2.3.3 Response (the querying registrar neither owns the domain nor has requested transfer)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="2201">
      <msg lang="en">Authorization error</msg>
      <value>
        <name xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">pippo1.it</name>
      </value>
      <extValue>
        <value>
          <reasonCode xmlns="">9051</reasonCode>
          </value>
          <reason lang="en">Lack of permissions to view status of domain transfer request</reason>
        </extValue>
      </result>
      <trID>
        <clTRID>ABC-12345</clTRID>
        <svTRID>DE0344416664</svTRID>
      </trID>
    </response>
  </epp>
```

```

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

```

4.2.3.4 Response (the domain is in pendingTransfer)

```

<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <msgQ count="1" id="227">
      <qDate>2008-02-25T06:40:01+01:00</qDate>
      <msg lang="en">Domain transfer has been requested:
        pendingTransfer is started</msg>
    </msgQ>
    <resData>
      <domain:trnData 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>pippo2.it</domain:name>
        <domain:trStatus>pending</domain:trStatus>
        <domain:reID>MARIO-LOFFREDO</domain:reID>
        <domain:reDate>2008-02-
          25T07:40:00+01:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2008-03-
          01T23:59:59+01:00</domain:acDate>
      </domain:trnData>
    </resData>
  </trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE6274716266</svTRID>
</trID>
</response>
</epp>

```

4.2.3.5 Response (the most recent transfer requested on the domain has been approved by the previous registrar and terminated successfully)

```

<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <msgQ count="3" id="226">
      <qDate>2008-02-21T14:15:00+01:00</qDate>

```



```

    <msg lang="en">DNS check ended successfully</msg>
  </msgQ>
</resData>
<domain:trnData 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>pippo2.it</domain:name>
  <domain:trStatus>clientApproved</domain:trStatus>
  <domain:reID>MARIO-LOFFREDO</domain:reID>
  <domain:reDate>2008-02-25T07:54:21+01:00</domain:reDate>
  <domain:acID>DEMO-REGISTRAR</domain:acID>
  <domain:acDate>2008-02-25T07:54:49+01:00</domain:acDate>
</domain:trnData>
</resData>
<trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>MA2564322642</svTRID>
</trID>
</response>
</epp>

```

4.2.3.6 Response (the domain is pendingTransfer, at the same time as the transfer a change of registrant has also been requested, the request for Transfer Query has been submitted by the registrar who issued the Transfer Request with “trade” extension)

```

<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:trnData 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>nic.it</domain:name>
        <domain:trStatus>pending</domain:trStatus>
        <domain:reID>MARIO-LOFFREDO</domain:reID>
        <domain:reDate>2008-07-29T15:02:34+02:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2008-08-03T23:59:59+02:00</domain:acDate>
      </domain:trnData>
    </resData>
    <extension>
      <extdom:trade xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-1.0"
        xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0 extdom-1.0.xsd">
        <extdom:transferTrade>
          <extdom:newRegistrant>MM2001</extdom:newRegistrant>
          <extdom:newAuthInfo>

```

```

        <extdom:pw>NEW2fooBAR</extdom:pw>
      </extdom:newAuthInfo>
    </extdom:transferTrade>
  </extdom:trade>
</extension>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>MA3324045222</svTRID>
</trID>
</response>
</epp>

```

NOTE

The response contains the extdom:trade extension because the registrar who made the Domain Transfer Query is the same as the one who made Domain Transfer Request with extdom:trade extension.

4.2.3.7 Response (the domain is in pendingTransfer, at the same time as the transfer a change of registrant has been requested, the request for Transfer Query has been submitted by the registrar that manages the domain)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
  = <response>
    = <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    = <resData>
      = <domain:trnData 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>nic.it</domain:name>
        <domain:trStatus>pending</domain:trStatus>
        <domain:reID>MARIO-LOFFREDO</domain:reID>
        <domain:reDate>2008-07-29T15:02:34+02:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2008-08-03T23:59:59+02:00</domain:acDate>
      </domain:trnData>
    </resData>
  = <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>DE2026115313</svTRID>
  </trID>
</response>
</epp>

```

NOTE

The response does not contain the extdom:trade extension because the registrar that made the request for Domain Transfer Query is the one that manages the domain.

4.3 Polling

4.3.1 Request (op = req)

```
<?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 Response (op = req – message that password is about to expire)

```
<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="1301">
<msg lang="en">Command completed successfully; ack to dequeue</msg>
</result>
= <msgQ count="1" id="26">
<qDate>2008-07-22T09:07:43+02:00</qDate>
<msg lang="en">Password will expire soon</msg>
</msgQ>
= <extension>
= <extepp:passwdReminder xmlns:extepp="http://www.nic.it/ITNIC-EPP/extepp-1.0"
xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extepp-1.0 extepp-1.0.xsd">
<extepp:exDate>2008-07-30T12:28:42+02:00</extepp:exDate>
</extepp:passwdReminder>
</extension>
= <trID>
<clTRID>ABC-12345</clTRID>
<svTRID>DE7234153350</svTRID>
</trID>
</response>
</epp>
```

NOTE

The response contains the *extepp: passwdReminder* extension which indicates when the password will expire

4.3.3 Response (op = req – message reporting that the validation of the DNS configuration of the domain terminated unsuccessfully)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1301">
      <msg lang="en">Command completed successfully; ack to
        dequeue</msg>
    </result>
    <msgQ count="7" id="1971">
      <qDate>2008-12-03T08:02:34+01:00</qDate>
      <msg lang="en">DNS check ended unsuccessfully</msg>
    </msgQ>
    <extension>
      <extdom:dnsErrorMsgData
        xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-1.0"
        xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0
          extdom-1.0.xsd">
        <extdom:responseId>80632e80-de1e-474c-9b5f-
          68b40d737c3f</extdom:responseId>
        <extdom:validationDate>2008-12-
          03T07:59:57+01:00</extdom:validationDate>
      </extdom:dnsErrorMsgData>
      <extdom:report>
        <extdom:domain name="pippo2.it." status="FAILED">
          <extdom:test name="NameserversResolvableTest"
            status="SUCCEEDED">
            <extdom:dns name="ns1.pippo2.it."
              status="SUCCEEDED" />
            <extdom:dns name="ns2.pippo2.it."
              status="SUCCEEDED" />
          </extdom:test>
          <extdom:test name="NameserversAnswerTest"
            status="FAILED">
            <extdom:dns name="ns1.pippo2.it."
              status="FAILED" />
            <extdom:dns name="ns2.pippo2.it."
              status="FAILED" />
          </extdom:test>
          <extdom:test name="NameserverReturnCodeTest"
            status="SUCCEEDED" />
          <extdom:test name="AATest" status="SUCCEEDED" />
          <extdom:test name="NSCompareTest"
            status="SUCCEEDED" />
          <extdom:test name="CNAMEHostTest"
            status="SUCCEEDED" />
          <extdom:test name="IPCompareTest"
            status="FAILED">
            <extdom:dns name="ns1.pippo2.it."
              status="FAILED">

```

```

= <extdom:dnsreport level="debug">
  = <![CDATA[
    ;; ->>HEADER<<- opcode: QUERY, status:
    NXDOMAIN, id: 16052
    ;; flags: qr rd ra ; qd: 1 an: 0 au: 1 ad: 0
    ;; QUESTIONS:
    ;;      ns1.pippo2.it., type = ANY, class =
    IN

    ;; ANSWERS:

    ;; AUTHORITY RECORDS:
    it.      5402    IN      SOA
            dns.nic.it. hostmaster.nic.it. 2008120301
            10800 3600 604800 10800

    ;; ADDITIONAL RECORDS:

    ;; Message size: 87 bytes
  ]]>
</extdom:dnsreport>
<extdom:dnsreport>Unresolveable
ns1.pippo2.it.</extdom:dnsreport>
</extdom:dns>
= <extdom:dns name="ns2.pippo2.it."
  status="FAILED">
= <extdom:dnsreport level="debug">
  = <![CDATA[
    ;; ->>HEADER<<- opcode: QUERY, status:
    NXDOMAIN, id: 15168
    ;; flags: qr rd ra ; qd: 1 an: 0 au: 1 ad: 0
    ;; QUESTIONS:
    ;;      ns2.pippo2.it., type = ANY, class =
    IN

    ;; ANSWERS:

    ;; AUTHORITY RECORDS:
    it.      5402    IN      SOA
            dns.nic.it. hostmaster.nic.it. 2008120301
            10800 3600 604800 10800

    ;; ADDITIONAL RECORDS:

```

```

;; Message size: 87 bytes
]]>
</extdom:dnsreport>
<extdom:dnsreport>Unresolveable
ns2.pippo2.it.</extdom:dnsreport>
</extdom:dns>
</extdom:test>
<extdom:test name="MXCompareTest"
status="SUCCEEDED" />
<extdom:test name="SOAMasterCompareTest"
status="SUCCEEDED" />
</extdom:domain>
</extdom:report>
</extdom:dnsErrorMsgData>
</extension>
= <trID>
<clTRID>ABC-12345</clTRID>
<svTRID>DE6323330406</svTRID>
</trID>
</response>
</epp>

```

NOTE

The response contains the extension **extdom:dnsErrorMsgData** which gives data on the validation of the correctness of the DNS configuration of the domain carried out by the synchronous server:

- **extdom:responseId**: unique ID code of the validation request carried out within the synchronous server
- **extdom:validationDate**: date of last validation
- **extdom:report**: report on error found
 - **extdom:domain**: (element)
 - **name**: domain name validated (attribute)
 - **status**: final result of validation (attribute)
 - **extdom:test**: (list of elements)
 - **name**: test name (attribute)
 - **status**: final result of the test (attribute)
 - **extdom:dns**: (list of elements)
 - **name**: name server of the test (attribute)
 - **status**: final result of the test on the name server (attribute)
 - **extdom:dnsreport**: (lista di elementi)
 - **level**: report level of the test (optional attribute)
 - report text of the test (element value)

4.3.4 Response (op = req – status change message following elaboration from a client or following an event - in this case following a cancellation request and consequent transition of the domain in the redemption period)

```
<?xml version="1.0" encoding="UTF-8" ?>
<= 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">
  = <response>
    = <result code="1301">
      <msg lang="en">Command completed successfully; ack to
        dequeue</msg>
      </result>
    = <msgQ count="1" id="84">
      <qDate>2008-08-04T18:57:45+02:00</qDate>
      <msg lang="en">redemptionPeriod is started</msg>
    </msgQ>
    = <extension>
      = <extdom:chgStatusMsgData
        xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-1.0"
        xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0
          extdom-1.0.xsd">
        <extdom:name>nic.it</extdom:name>
        = <extdom:targetStatus>
          <domain:status
            xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
            s="pendingDelete" lang="en" />
          <rgp:rgpStatus xmlns:rgp="urn:ietf:params:xml:ns:rgp-
            1.0" s="redemptionPeriod" lang="en" />
          </extdom:targetStatus>
        </extdom:chgStatusMsgData>
      </extension>
    = <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE5746633232</svTRID>
    </trID>
  </response>
</epp>
```

NOTE

The response contains the extension **extdom:chgStatusMsgData** which shows the following information:

- **extdom:name**: the domain name that the message refers to and which has been subject to a status transition
- **extdom:targetStatus**: the arrival status of the domain constrains the statuses that can belong to the standard ones described in the domain-1.0.xsd (tag domain:status) schema, to the extension of the protocol for the grace period and are described in rgp-1.0.xsd (tag rgp:rgpStatus) schema or to the extension extdom-1.0.xsd (tag: extdom:ownStatus);

4.3.5 Response (op = req – message reporting that the validation of the DNS configuration of the domain terminated successfully with warning)

The response reports in the <extension> section the tag:

```
<extdom:dnsWarningMsgData xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-1.0" xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0 extdom-1.0.xsd">
```

The tag <extdom:dnsWarningMsgData> contains two subtags:

- <extdom:chgStatusMsgData> with the same structure as reported above;
- <extdom:dnsWarningData> with the same structure of the tag <extdom:dnsErrorMsgData> as reported above.

4.3.6 Response (op = req – simple notification message on an event in a domain - in this case the domain has been deleted)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1301">
      <msg lang="en">Command completed successfully; ack to
        dequeue</msg>
    </result>
    <msgQ count="1" id="24">
      <qDate>2008-07-21T12:44:37+02:00</qDate>
      <msg lang="en">Domain has been deleted</msg>
    </msgQ>
    <extension>
      <extdom:simpleMsgData xmlns:extdom="http://www.nic.it/ITNIC-
        EPP/extdom-1.0"
        xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0
          extdom-1.0.xsd">
        <extdom:name>nic.it</extdom:name>
      </extdom:simpleMsgData>
    </extension>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE6463463742</svTRID>
    </trID>
  </response>
</epp>
```

NOTE

The response contains the extension *extdom:simpleMsgData* that shows only the domain name referred to in the message

4.3.7 Response (op = req – delegation interruption message following the deletion of a domain superordinated of the name server associated with other domains)

```
<?xml version="1.0" encoding="UTF-8" ?>
<= <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">
  = <response>
    = <result code="1301">
      <msg lang="en">Command completed successfully; ack to
        dequeue</msg>
      </result>
    = <msgQ count="1" id="24">
      <qDate>2008-07-21T12:50:57+02:00</qDate>
      <msg lang="en">Lost delegation</msg>
      </msgQ>
    = <extension>
      = <extdom:dlgMsgData xmlns:extdom="http://www.nic.it/ITNIC-
        EPP/extdom-1.0"
        xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0
          extdom-1.0.xsd">
        <extdom:name>nic.it</extdom:name>
        = <extdom:ns>nameserver.cnr.it</extdom:ns>
        </extdom:dlgMsgData>
      </extension>
    = <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE6463463742</svTRID>
    </trID>
  </response>
</epp>
```

4.3.8 Response (op = req – domain transfer request message by the registrar “MARIO-LOFFREDO” that carried out a Domain Transfer “op=request” – the message is in the polling queue of the registrar “DEMO-REGISTRAR” that manages the domain)

```
<?xml version="1.0" encoding="UTF-8" ?>
<= <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">
  = <response>
    = <result code="1301">
      <msg lang="en">Command completed successfully; ack to
        dequeue</msg>
      </result>
    = <msgQ count="1" id="33">
      <qDate>2008-07-29T10:19:16+02:00</qDate>
      <msg lang="en">Domain transfer has been requested:
        pendingTransfer is started</msg>
      </msgQ>
    = <resData>
```

```

= <domain:trnData 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>nic.it</domain:name>
  <domain:trStatus>pending</domain:trStatus>
  <domain:reID>MARIO-LOFFREDO</domain:reID>
  <domain:reDate>2008-07-29T10:19:16+02:00</domain:reDate>
  <domain:acID>DEMO-REGISTRAR</domain:acID>
  <domain:acDate>2008-08-03T23:59:59+02:00</domain:acDate>
</domain:trnData>
</resData>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE0637101245</svTRID>
</trID>
</response>
</epp>

```

4.3.9 Response (op = req – domain transfer request message cancelled by the registrar “MARIO-LOFFREDO” with a Domain Transfer “op=cancel” – the message is in the polling queue of the registrar “DEMO-REGISTRAR” that manages the domain)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="1301">
  <msg lang="en">Command completed successfully; ack to dequeue</msg>
</result>
= <msgQ count="1" id="34">
  <qDate>2008-07-29T10:23:34+02:00</qDate>
  <msg lang="en">Domain transfer has been cancelled</msg>
</msgQ>
= <resData>
= <domain:trnData 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>nic.it</domain:name>
  <domain:trStatus>clientCancelled</domain:trStatus>
  <domain:reID>MARIO-LOFFREDO</domain:reID>
  <domain:reDate>2008-07-29T10:19:16+02:00</domain:reDate>
  <domain:acID>DEMO-REGISTRAR</domain:acID>
  <domain:acDate>2008-07-29T10:23:34+02:00</domain:acDate>
</domain:trnData>
</resData>
= <trID>
  <clTRID>ABC-12345</clTRID>

```

```

    <svTRID>DE2670233227</svTRID>
  </trID>
</response>
</epp>

```

4.3.10 Response (op = req – transfer request message refused by the registrar “DEMO-REGISTRAR” with a Domain Transfer “op=reject” – the message is in the polling queue of the registrar “MARIO-LOFFREDO” who previously made the transfer request)

```

<?xml version="1.0" encoding="UTF-8" ?>
<= 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">
  = <response>
    = <result code="1301">
      <msg lang="en">Command completed successfully; ack to
        dequeue</msg>
    </result>
    = <msgQ count="1" id="36">
      <qDate>2008-07-29T10:31:23+02:00</qDate>
      <msg lang="en">Domain transfer has been rejected</msg>
    </msgQ>
    = <resData>
      = <domain:trnData 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>nic.it</domain:name>
        <domain:trStatus>clientRejected</domain:trStatus>
        <domain:reID>MARIO-LOFFREDO</domain:reID>
        <domain:reDate>2008-07-
          29T10:30:39+02:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2008-07-
          29T10:31:22+02:00</domain:acDate>
      </domain:trnData>
    </resData>
    = <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>MA3616063160</svTRID>
    </trID>
  </response>
</epp>

```

4.3.11 Response (op = req – domain transfer message request approved by the registrar “DEMO-REGISTRAR” with a Domain Transfer “op=approve” – the message is in the polling queue of the new registrar “MARIO-LOFFREDO” and, with a different svTRID, in the polling queue of the old registrar “DEMO-REGISTRAR”)

```

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

```

```

=> <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">
=> <response>
=> <result code="1301">
  <msg lang="en">Command completed successfully; ack to
    dequeue</msg>
  </result>
=> <msgQ count="1" id="36">
  <qDate>2008-07-29T10:31:23+02:00</qDate>
  <msg lang="en">Domain transfer has been executed</msg>
  </msgQ>
=> <resData>
  => <domain:trnData 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>nic.it</domain:name>
    <domain:trStatus>clientApproved</domain:trStatus>
    <domain:reID>MARIO-LOFFREDO</domain:reID>
    <domain:reDate>2008-07-
      29T10:30:39+02:00</domain:reDate>
    <domain:acID>DEMO-REGISTRAR</domain:acID>
    <domain:acDate>2008-07-
      29T10:31:22+02:00</domain:acDate>
    </domain:trnData>
  </resData>
=> <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>MA6908753421</svTRID>
  </trID>
</response>
</epp>

```

4.3.12 Response (op = req – domain transfer message request approved by the server for the expiry of the pendingTransfer period – the message is in the polling queue of the new registrar “MARIO-LOFFREDO” and, with a different svTRID, in the polling queue of the old registrar “DEMO-REGISTRAR”)

```

<?xml version="1.0" encoding="UTF-8" ?>
=> <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">
=> <response>
=> <result code="1301">
  <msg lang="en">Command completed successfully; ack to
    dequeue</msg>
  </result>
=> <msgQ count="1" id="36">
  <qDate>2008-07-29T10:31:23+02:00</qDate>
  <msg lang="en">Domain transfer is expired: transfer has been
    executed</msg>
  </msgQ>
=> <resData>

```

```

= <domain:trnData 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>nic.it</domain:name>
  <domain:trStatus>clientApproved</domain:trStatus>
  <domain:reID>MARIO-LOFFREDO</domain:reID>
  <domain:reDate>2008-07-29T10:30:39+02:00</domain:reDate>
  <domain:acID>DEMO-REGISTRAR</domain:acID>
  <domain:acDate>2008-07-29T10:31:22+02:00</domain:acDate>
</domain:trnData>
</resData>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>MA5790443211</svTRID>
</trID>
</response>
</epp>

```

4.3.13 Request (op = ack)

```

<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <command>
    <poll op="ack" msgID="227"/>
    <clTRID>ABC-12346</clTRID>
  </command>
</epp>

```

4.3.14 Response (op = ack)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
  = <response>
    = <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    = <trID>
      <clTRID>ABC-12346</clTRID>
      <svTRID>DE7575242452</svTRID>
    </trID>
  </response>
</epp>

```

4.3.15 Response (op = req messages not present in queue)

```

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

```

```

=> <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">
=> <response>
=>   <result code="1300">
=>     <msg lang="en">Command completed successfully; no
=>       messages</msg>
=>   </result>
=> <trID>
=>   <clTRID>ABC-12345</clTRID>
=>   <svTRID>DE0550674265</svTRID>
=> </trID>
=> </response>
=> </epp>

```

4.3.16 Response (op = ack messages not present in queue)

```

<?xml version="1.0" encoding="UTF-8" ?>
=> <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">
=> <response>
=>   <result code="2303">
=>     <msg lang="en">Object does not exist</msg>
=>     <extValue>
=>       <value>
=>         <reasonCode xmlns="">5004</reasonCode>
=>       </value>
=>       <reason lang="en">There are no messages in the
=>         queue</reason>
=>     </extValue>
=>   </result>
=> <trID>
=>   <clTRID>ABC-12346</clTRID>
=>   <svTRID>DE0715365000</svTRID>
=> </trID>
=> </response>
=> </epp>

```

4.3.17 Messages that do not regard the domains

The following table summarizes the messages that do not regard the domains

Event	Message
Registrar password about to expire	Password will expire soon
Current credit is under the personal threshold set by the registrar	Credit is under the threshold set by the registrar
Low credit: minimum threshold very close	Low credit will be reached soon
Low credit: minimum threshold reached	Low credit: only auto renew and not invoiced operations are allowed

Credit ~ 0	Out of funds: only not invoiced operations are allowed
------------	--

4.3.18 Messages that regard the domains

The following table summarizes the correspondences between the events of the EPP server and the messages in the polling code.

At the moment the table contains only the events due to the interaction with the EPP server. When the production server will be up and running, the table will also contain the events caused by the administration interface of the synchronous system (cancellations, contestations, etc.).

With (ext=restore) the request for recovery of a domain in pendingDelete/redemptionPeriod status is expressed. This request is an extension of Update Domain reported later in this document.

Event	Start status	Destination status	Message
Reception of a Create Domain	--	inactive/ <i>dnsHold</i>	dnsHold is started
DNS check OK	inactive/ <i>dnsHold</i>	ok	DNS check ended successfully
			DNS check ended successfully with warning
DNS check KO	inactive/ <i>dnsHold</i>	inactive/ <i>dnsHold</i>	DNS check ended unsuccessfully
Reception of an Update Domain for change host	inactive/ <i>dnsHold</i>	inactive/ <i>dnsHold</i>	--
Expiry dnsHold	inactive/ <i>dnsHold</i>	pendingDelete	dnsHold is expired
Reception of an Update Domain for change host	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	ok (old DNS configuration)	DNS check ended unsuccessfully
Expiry pendingUpdate	pendingUpdate	ok (old DNS configuration)	pendingUpdate is expired
Reception of a Delete Domain	ok	pendingDelete/ <i>redemptionPeriod</i>	redemptionPeriod is started
	ok/ <i>autoRenewPeriod</i>		
Expiry redemptionPeriod	pendingDelete/ <i>redemptionPeriod</i>	pendingDelete	redemption Period is expired
	pendingDelete/ <i>redemptionPeriod</i> / <i>challenged</i>	inactive/ toBeReassigned	
Reception of an Update Domain (ext=restore)	pendingDelete/ <i>redemptionPeriod</i>	ok	--
	ok/ <i>noRegistrar</i>		
	inactive/ <i>noRegistrar</i>		

Expiry pendingDelete	pendingDelete	--	Domain has been deleted (for the registrar that manages the domain) Lost delegation (for the registrars that manage those domains whose nameservers are subordinate to the cancelled domain)
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/ <i>noRegistrar</i>		
	inactive/ <i>noRegistrar</i>		
	inactive/ <i>toBeReassigned</i>		
	inactive/ <i>notRenewed</i>		
Reception of a Transfer Domain (op=reject)	pendingTransfer	inactive/ <i>noRegistrar</i> (if transfer began in autoRenewPeriod and domain is not in autoRenewPeriod)	Domain transfer has been rejected (for the registrar that requested transfer)
		ok (if transfer did not begin in autoRenewPeriod and domain is not in autoRenewPeriod)	
		ok/ <i>autoRenewPeriod</i> (if domain is in autoRenewPeriod and credit > 0)	
		inactive/ <i>notRenewed</i> (if credit = 0)	
Reception of a Transfer Domain (op=cancel)	pendingTransfer	inactive/ <i>noRegistrar</i> (if transfer began in autoRenewPeriod and domain is not in autoRenewPeriod)	Domain transfer has been cancelled (for the registrar that manages the domain)
		ok (if transfer did not begin in autoRenewPeriod and domain is not in autoRenewPeriod)	
		ok/ <i>autoRenewPeriod</i> (if domain is in autoRenewPeriod and credit > 0)	
		inactive/ <i>notRenewed</i> (if credit = 0)	
Reception of a Transfer Domain (op=approve)	pendingTransfer	ok	Domain transfer has been executed (for the registrar that requested transfer)

			Domain transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name <i>(for the registrar that manages the domain)</i>
Expiry pendingTransfer	pendingTransfer	ok	Domain transfer is expired: transfer has been executed <i>(for the registrar that requested transfer)</i> Domain transfer is expired: transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name <i>(for the registrar that manages the domain)</i>
Reception of a Transfer Domain (op=request with ext. Trade)	ok ok/ <i>noRegistrar</i> inactive/ <i>noRegistrar</i> inactive/ <i>toBeReassigned</i> inactive/ <i>notRenewed</i>	pendingTransfer	Domain and trade transfer has been requested: pendingTransfer is started <i>(for the registrar that manages the domain)</i>
Reception of a Transfer Domain (op=reject) for Domain and Trade Transfer	pendingTransfer	inactive/ <i>noRegistrar</i> (if transfer begin in autoRenewPeriod and domain is not in autoRenewPeriod) ok (if transfer did not begin in autoRenewPeriod and domain is not in autoRenewPeriod) ok/ <i>autoRenewPeriod</i> (if domain is in autoRenewPeriod and credit > 0) inactive/ <i>notRenewed</i> (if credit = 0)	Domain and trade transfer has been rejected <i>(for the registrar that requested transfer)</i>
Reception of a Transfer Domain (op=cancel) for Domain and Trade Transfer	pendingTransfer	inactive/ <i>noRegistrar</i> (if transfer began in autoRenewPeriod and domain is not in autoRenewPeriod) ok (if transfer did not begin in autoRenewPeriod and domain is not in autoRenewPeriod)	Domain and trade transfer has been cancelled <i>(for the registrar that manages the domain)</i>

		ok/ <i>autoRenewPeriod</i> (if domain is in <i>autoRenewPeriod</i> and credit > 0)	
		inactive/ <i>notRenewed</i> (if credit = 0)	
Reception of a Transfer Domain (op=approve) for Domain and Trade Transfer	pendingTransfer	ok	Domain and trade transfer has been executed (<i>for the registrar that requested transfer</i>)
			Domain and trade transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name (<i>for the registrar that manages the domain</i>)
Expiry pendingTransfer for Domain and Trade Transfer	pendingTransfer	ok	Domain and trade transfer is expired: transfer has been executed (<i>for the registrar that requested transfer</i>)
			Domain and trade transfer is expired: transfer has been executed. You should therefore remove the records contained on your nameservers for such domain name (<i>for the registrar that manages the domain</i>)
Expiry domain and credit > 0	ok	ok	autoRenewPeriod is started
	pendingUpdate	pendingUpdate	
	pendingTransfer	pendingTransfer	
	pendingDelete/ <i>redemptionPeriod</i>	pendingDelete/ <i>redemptionPeriod</i>	
Expiry domain and credit = 0	ok	inactive/ <i>notRenewed</i>	Not Renewed is started
Expiry domain	ok/ <i>noRegistrar</i>	inactive/ <i>noRegistrar</i>	--
Expiry autoRenewPeriod	ok	<i>auto Renew Period</i>	autoRenewPeriod is expired
	pendingUpdate		
	pendingTransfer		
	pendingDelete/ <i>redemptionPeriod</i>		
Expiry toBeReassigned	inactive/ <i>toBeReassigned</i>	pendingDelete	Reassignment is expired
Expiry revoked	inactive/ <i>revoked</i>	pendingDelete	Revoke is expired
	inactive/ <i>revoked/challenged</i>	inactive/ <i>toBeReassigned</i>	
Expiry notRenewed	inactive/ <i>notRenewed</i>	pendingDelete	Not Renewed is expired
	inactive/ <i>notRenewed/challenged</i>	inactive/ <i>toBeReassigned</i>	
Registrar is not active	--	ok/noRegistrar	No Registrar is started

Reception of a Transfer Domain (op=reject) for Domain and Trade Transfer (if transfer begin in autoRenewPeriod and domain is not in autoRenewPeriod)	pendingTransfer	inactive/noRegistrar		
Expiry noRegistrar	inactive/noRegistrar	pendingDelete	No Registrar is expired	
	inactive/noRegistrar /challenged	inactive/toBeReassigned		
Credit refunded	inactive/ notRenewed	ok (if domain is not in autoRenewPeriod)	Not Renewed is ended	
		ok/ autoRenewPeriod (if domain is in autoRenewPeriod)		
Revocation	ok	inactive/ revoked	Revoke is started	
	pendingTransfer			
	pendingUpdate			
	pendingDelete/ redemptionPeriod			
	ok/ noRegistrar			
	inactive/ noRegistrar			
	inactive/ notRenewed			
Reception of a challenge request	ok	ok	challenged	Challenge procedure is started
	pendingTransfer	pendingTransfer		
	pendingUpdate	pendingUpdate		
	pendingDelete/ redemptionPeriod	pendingDelete/ redemptionPeriod		
	ok/ noRegistrar	ok/ noRegistrar		
	inactive/ noRegistrar	inactive/ noRegistrar		
	inactive/ notRenewed	inactive/ notRenewed		
Challenge procedure terminated	ok	challenged	ok	Challenge procedure is ended
	pendingTransfer			
	pendingUpdate			
	pendingDelete/ redemptionPeriod			
	ok/ noRegistrar			
	inactive/ noRegistrar			
	inactive/ notRenewed			
	pendingTransfer			
	pendingUpdate			
	pendingDelete/ redemptionPeriod			
	ok/ noRegistrar			
	inactive/ noRegistrar			

	<i>inactive/ notRenewed</i>			
	<i>pendingTransfer</i>			
	<i>pendingUpdate</i>			
	<i>pendingDelete/ redemptionPeriod</i>			
	<i>ok/ noRegistrar</i>			
	<i>inactive/ noRegistrar</i>			
	<i>inactive/ notRenewed</i>			
Reception of a hold request from a registrant	<i>ok</i>	<i>inactive/serverHold</i>		Hold by registrant is started
Removal of hold by a registrant	<i>inactive/serverHold</i>	<i>ok</i>		Hold by registrant is ended
Reception of a hold request from a third party	<i>ok</i>	<i>inactive/serverHold</i>		Hold by third party is started
Removal of hold by a third party	<i>inactive/serverHold</i>	<i>ok</i>		Hold by third party is ended
Domain is put in hold by the registry	<i>ok</i>	<i>inactive/serverHold</i>		Hold by server is started

Removal of hold by the registry	<i>inactive/serverHold</i>	<i>ok</i>	Hold by server is ended
Reception of a lock request from a registrant	<i>ok</i>	<i>ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited</i>	Lock by registrant is started
Removal of lock by a registrant	<i>ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited</i>	<i>ok</i>	Lock by registrant is ended
Reception of a lock request from a third party	<i>ok</i>	<i>ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited</i>	Lock by third party is started
Removal of lock by a third party	<i>ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited</i>	<i>ok</i>	Lock by third party is ended
Domain is put in lock by the registry	<i>ok</i>	<i>ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited</i>	Lock by server is started

Removal of lock by the registry	<i>ok/serverUpdateProhibited/serverDeleteProhibited/serverTransferProhibited</i>	<i>ok</i>	Lock by server is ended
Reception of a Delete Domain	<i>ok/autoRenewPeriod</i>	<i>pendingDelete/redemptionPeriod</i>	Refund renew for deleting domain in autoRenewPeriod
Hybrid domain transfer to a maintainer ended successfully	<i>ok/autoRenewPeriod</i>	--	Refund renew for transferring domain to a maintainer in autoRenewPeriod
Hybrid domain transfer and change registrant to a maintainer ended successfully	<i>ok/autoRenewPeriod</i>	--	Refund renew for transferring and trading domain to a maintainer in autoRenewPeriod
Reception of a Transfer Domain (op=approve) for Domain Transfer	<i>ok/autoRenewPeriod</i>	<i>ok</i>	Refund renew for transferring domain to a registrar in autoRenewPeriod
Expiry pendingTransfer for Domain Transfer			

Reception of a Transfer Domain (op=approve) for Domain and Trade Transfer	<i>ok/autoRenewPeriod</i>	<i>ok</i>	Refund renew for transferring and trading domain to a registrar in autoRenewPeriod
Expiry pendingTransfer for Domain and Trade Transfer			
Expiry of autoRenewPeriod during pendingTransfer	<i>pendingTransfer/autoRenewPeriod</i>	<i>pendingTransfer</i>	Refund renew for autoRenewPeriod expired during pendingTransfer
Reception of a Transfer Domain (op=reject) for Domain Transfer	<i>pendingTransfer</i>	--	Refund domain transfer to a registrar for rejecting transfer
Reception of a Transfer Domain (op=reject) for Domain and Trade Transfer	<i>pendingTransfer</i>	--	Refund domain transfer and trade to a registrar for rejecting transfer
Reception of a Transfer Domain (op=cancel) for Domain Transfer	<i>pendingTransfer</i>	--	Refund domain transfer to a registrar for cancelling transfer

Reception of a Transfer Domain (op=cancel) for Domain and Trade Transfer	<i>pendingTransfer</i>	--	Refund domain transfer and trade to a registrar for cancelling transfer
Reception of a Restore Domain for expired domain	<i>inactive/noRegistrar</i>	<i>ok</i>	Debit renew for restoring expired domain in inactive/noRegistrar
		<i>ok/autoRenewPeriod</i>	
Reception of a Restore Domain for expired domain	<i>pendingDelete/redemptionPeriod</i>	<i>ok</i>	Debit renew for restoring expired domain in pendingDelete/redemptionPeriod
		<i>ok/autoRenewPeriod</i>	

4.3.19 Correspondence between messages and schemas

The table below shows the relationship between messages, schemas and types within the schema.

Message	XML Schema	Type
Password will expire soon	extepp-1.0-1.0.xsd	extepp:passwdReminder
Credit is under the threshold set by the registrar	extepp-1.0-1.0.xsd	extepp:creditMsgData
Low credit will be reached soon	extepp-1.0-1.0.xsd	extepp:creditMsgData
Low credit: only auto renew and not invoiced operations are allowed	extepp-1.0-1.0.xsd	extepp:creditMsgData
Out of funds: only not invoiced operations are allowed	extepp-1.0-1.0.xsd	extepp:creditMsgData
dnsHold is started	extdom-1.0.xsd	extdom:chgStatusMsgData
dnsHold is expired	extdom-1.0.xsd	extdom:chgStatusMsgData
DNS check ended unsuccessfully	extdom-1.0.xsd	extdom:dnsErrorMsgData
DNS check ended successfully	extdom-1.0.xsd	extdom:chgStatusMsgData
DNS check ended successfully with warning	extdom-1.0.xsd	extdom:dnsWarningMsgData
pendingUpdate is started	extdom-1.0.xsd	extdom:chgStatusMsgData

pendingUpdate is expired	extdom-1.0.xsd	extdom:chgStatusMsgData
redemptionPeriod is started	extdom-1.0.xsd	extdom:chgStatusMsgData
redemptionPeriod is expired	extdom-1.0.xsd	extdom:chgStatusMsgData
pendingDelete is started	extdom-1.0.xsd	extdom:chgStatusMsgData
Domain has been deleted	extdom-1.0.xsd	extdom:simpleMsgData
Lost delegation	extdom-1.0.xsd	extdom:dlgMsgData
autoRenewPeriod is started	extdom-1.0.xsd	extdom:chgStatusMsgData
autoRenewPeriod is expired	extdom-1.0.xsd	extdom:chgStatusMsgData
Revoke is started	extdom-1.0.xsd	extdom:chgStatusMsgData
Revoke is expired	extdom-1.0.xsd	extdom:chgStatusMsgData
No Registrar is started	extdom-1.0.xsd	extdom:chgStatusMsgData
No Registrar is expired	extdom-1.0.xsd	extdom:chgStatusMsgData
Reassignment is expired	extdom-1.0.xsd	extdom:chgStatusMsgData
Not Renewed is started	extdom-1.0.xsd	extdom:chgStatusMsgData
Not Renewed is ended	extdom-1.0.xsd	extdom:chgStatusMsgData
Not Renewed is expired	extdom-1.0.xsd	extdom:chgStatusMsgData
Challenge procedure is started	extdom-1.0.xsd	extdom:chgStatusMsgData
Challenge procedure is ended	extdom-1.0.xsd	extdom:chgStatusMsgData
Hold by registrant is started	extdom-1.0.xsd	extdom:chgStatusMsgData
Hold by third party is started	extdom-1.0.xsd	extdom:chgStatusMsgData
Hold by server is started	extdom-1.0.xsd	extdom:chgStatusMsgData
Hold by registrant is ended	extdom-1.0.xsd	extdom:chgStatusMsgData
Hold by third party is ended	extdom-1.0.xsd	extdom:chgStatusMsgData
Hold by server is started	extdom-1.0.xsd	extdom:chgStatusMsgData
Lock by registrant is started	extdom-1.0.xsd	extdom:chgStatusMsgData
Lock by third party is started	extdom-1.0.xsd	extdom:chgStatusMsgData
Lock by server is started	extdom-1.0.xsd	extdom:chgStatusMsgData
Lock by registrant is ended	extdom-1.0.xsd	extdom:chgStatusMsgData
Lock by third party is ended	extdom-1.0.xsd	extdom:chgStatusMsgData
Lock by server is ended	extdom-1.0.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-1.0.xsd	domain:trnData extdom:trade
Domain and trade transfer has been rejected	domain-1.0.xsd extdom-1.0.xsd	domain:trnData extdom:trade
Domain and trade transfer has been cancelled	domain-1.0.xsd extdom-1.0.xsd	domain:trnData extdom:trade
Domain and trade transfer has been executed	domain-1.0.xsd extdom-1.0.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-1.0.xsd	domain:trnData extdom:trade
Domain and trade transfer is expired: transfer has been executed	domain-1.0.xsd extdom-1.0.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-1.0.xsd	domain:trnData extdom:trade
Refund renew for deleting domain in autoRenewPeriod	extdom-1.0.xsd	extedom:delayedDebitAndRefund MsgData
Refund renew for transferring domain to a maintainer in autoRenewPeriod	extdom-1.0.xsd	extedom:delayedDebitAndRefund MsgData
Refund renew for transferring and trading domain to a maintainer in autoRenewPeriod	extdom-1.0.xsd	extedom:delayedDebitAndRefund MsgData
Refund renew for transferring domain to a registrar in autoRenewPeriod	extdom-1.0.xsd	extedom:delayedDebitAndRefund MsgData
Refund renew for transferring and trading domain to a registrar in autoRenewPeriod	extdom-1.0.xsd	extedom:delayedDebitAndRefund MsgData
Refund renew for autoRenewPeriod expired during pendingTransfer	extdom-1.0.xsd	extedom:delayedDebitAndRefund MsgData
Refund domain transfer to a registrar for rejecting transfer	extdom-1.0.xsd	extedom:delayedDebitAndRefund MsgData
Refund domain transfer and trade to a registrar for rejecting transfer	extdom-1.0.xsd	extedom:delayedDebitAndRefund MsgData
Refund domain transfer to a registrar for cancelling transfer	extdom-1.0.xsd	extedom:delayedDebitAndRefund MsgData
Refund domain transfer and trade to a registrar for cancelling transfer	extdom-1.0.xsd	extedom:delayedDebitAndRefund MsgData
Debit renew for restoring expired domain in inactive/noRegistrar	extdom-1.0.xsd	extedom:delayedDebitAndRefund MsgData

Debit renew for restoring expired domain in pendingDelete/redemptionPeriod	extdom-1.0.xsd	extedom:delayedDebitAndRefundMsgData
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Formattati: Elenchi puntati e numerati

4.94.3.20 Email to Registrant

In some cases the EPP server sends a notification mail directly to the Registrant:

- Registration of a domain name terminated successfully
- Change of the Registrant terminated successfully (mails are sent both to the new and old Registrant)
- Domain and trade transfer terminated successfully (mails are sent both to the new and old Registrant)
- A domain is passed to the state ok/noRegistrar
- A domain is passed to the state inactive/noRegistrar

The templates of the mails are reported in the following.

Formattati: Elenchi puntati e numerati

4.94.3.20.1 Registration of a new domain name – Notification to the Registrant

The message is sent to the Registrant when a new domain is created or is sent to the new Registrant when the Registrant of an existing domain is changed.

Subject: 10300 - New registration of the domain name %name%

We inform you that on %upDate% the domain name %name% has been registered through the Registrar %clID%.

The outcome of the registration is:

Registrant: %newRegistrant.postalInfoLoc.org%
Address: %newRegistrant.postalInfoLoc.addr.firstStreet% -
%newRegistrant.postalInfoLoc.addr.city%
Nation: %newRegistrant.postalInfoLoc.addr.cc% %newRegistrant.nationality%
Phone: %newRegistrant.voice.completeNumber%
Fax: %newRegistrant.fax.completeNumber%
Regcode: %newRegistrant.registrant.regCode%
Email: %newRegistrant.email%
EntityType: %newRegistrant.registrant.entityType%

The domain name %name% has been put in %destinationStatusesAsString% status.

The Registrant, has made the following choices concerning consent:

- consent for personal data treatment for the registration: YES
- consent for personal data treatment for diffusion and accessibility via the Internet: %newRegistrant.consentForPublishingYesNo%

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

- to be European citizen or resident in EU countries (registration for natural person);
- to have the registered office based in a European country (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 successive 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 fulfil 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 ccTLD .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 for the defence of rights as well as the fulfilment 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,

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

4.94.3.20.2 Change of the Registrant – Notification to the old Registrant

The message is sent to the old Registrant when the Registrant of an existing domain is changed.

Subject: 10301 - Modification of the Registrant for the domain name %name%

We inform you that an operation of modification of the Registrant for the domain name %name% was made on %update%. Therefore %oldRegistrant.postalInfoLoc.org% is no longer the Registrant of the domain name in object.

Best regards,

ccTLD ".it" Registry
Istituto di Informatica e Telematica
CNR - AREA DELLA RICERCA
Via Giuseppe Moruzzi, 1 - I-56124 PISA
Ph: +39 050 3139811

Formattati: Elenchi puntati e numerati

Fax: +39 050 3152713 (External Relations Unit)

Email: hostmaster@nic.it

4.94.3.20.3 Domain passed to the state ok/noRegistrar – Notification to the Registrant

Formattati: Elenchi puntati e numerati

The message is sent to the Registrant when the domain has passed to the state ok/noRegistrar.

Subject: 10302 - Domain name %name% changing to ok/noRegistrar status

We inform you that the domain name %name% assigned in use to the Registrant %newRegistrant.postalInfoLoc.org% and maintained by %clID%, was put in ok/noRegistrar status on %upDate%, because the Registrar %clID% no longer has a valid contract with the ccTLD "it" Registry

The Registrant of a domain name in ok/noRegistrar status can request the reactivation of the domain name by means of an operation of modification of the Registrar according to the specifications described in the synchronous Technical Guidelines.

In absence of the above described operation of modification of the MNT, 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.

In inactive/no Registrar status, the Registry will remove the delegations in the ccTLD .it zone from the authoritative nameservers of the domain name, therefore the domain name will no longer be accessible via the Internet.

The Registrant of a domain name that is in inactive/no Registrar status can request its reactivation by means of an operation of modification of the Registrar according to the specifications described in the synchronous Technical Guidelines.

If by the expiry date of the inactive/noRegistrar status, the operations described above 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).

For further information and details the Registrant may visit the website of the Registry at the URL <http://www.nic.it>.

Best regards,

ccTLD ".it" Registry

Istituto di Informatica e Telematica

CNR - AREA DELLA RICERCA

Via Giuseppe Moruzzi, 1 - I-56124 PISA

Ph: +39 050 3139811

Fax: +39 050 3152713 (External Relations Unit)

Email: hostmaster@nic.it

4.94.3.20.4 Domain passed to the state inactive/noRegistrar – Notification to the Registrant

Formattati: Elenchi puntati e numerati

The message is sent to the Registrant when the domain has passed to the state inactive/noRegistrar.

Subject: 10303 - Domain name %name% changing to inactive/noRegistrar status

We inform you that the domain name %name% assigned in use to the Registrant %newRegistrant.postalInfoLoc.org% and maintained by %clID% has been put in inactive/noRegistrar status on %upDate%.

The registrant has 60 (sixty) days, from the %upDate% to request, by means of his/her Registrar (%clID%), 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 synchronous 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/no Registrar 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 %clID%, or access the website of the Registry at the URL <http://www.nic.it>.

Best regards,

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

5. Commands for changing the status of Contact and Domain

5.1 Creating and changing Contact objects

5.1.1 Create Contact

5.1.1.1 Request (creation of Tech or Admin*)

```
<?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>mb001</contact:id>
    <contact:postalInfo type="loc">
      <contact:name>Marco Bertoli</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="">+39.058375123</contact:voice>
<contact:fax>+39.058375124</contact:fax>
<contact:email>marco.bertoli@iit.cnr.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>
<c|TRID>ABC-12345</c|TRID>
</command>
</epp>

```

* the contacts thus created can be used as Tech and Admin; the association is made during the elaboration of the Create Domain command.

5.1.1.2 Request (creating a Registrant 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>
<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>mm001</contact:id>
  <contact:postalInfo type="loc">
    <contact:name>Maurizio Martinelli</contact:name>
    <contact:org> Maurizio Martinelli</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="">+39.0503153497</contact:voice>
  <contact:fax>+39.0503153498</contact:fax>
  <contact:email>maurizio.martinelli@iit.cnr.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>MRTMRZ64R15B509O</extcon:regCode>
    </extcon:registrant>
  </extcon:create>
</extension>
<cITRID>ABC-12345</cITRID>
</command>
</epp>

```

The contact in the example is a "natural person" in fact (entityType = 1) is the regCode field that contains the tax code of the individual. In other cases it must contain the corporate VAT number.

5.1.1.3 Response (creation of a contact terminated successfully)

```

<?xml version="1.0" encoding="UTF-8" ?>
<= 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">
  <= <response>
    <= <result code="1001">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <= <resData>
      <= <contact:creData 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:crDate>2008-04-
        16T11:43:32+01:00</contact:crDate>
      </contact:creData>
    </resData>
    <= <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE1726130025</svTRID>
    </trID>
  </response>

```



```
</epp>
```

5.1.1.4 Response (creation of Registrant with incorrect tax code)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="2004">
      <msg lang="en">Parameter value range error</msg>
      <extValue>
        <value>
          <reasonCode xmlns="">8027</reasonCode>
        </value>
        <reason lang="en">Registrant: invalid reg code</reason>
      </extValue>
    </result>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE6260477045</svTRID>
    </trID>
  </response>
</epp>
```

5.1.2 Update Contact

5.1.2.1 Request (telephone number change)

```
<?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>tech001</contact:id>
        <contact:chg>
          <contact:voice x="1234">+39.050123456</contact:voice>
        </contact:chg>
      </contact:update>
    </update>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

5.1.2.2 Request (addition of clientUpdateProhibited constraint – it will not be possible to make any changes other than the removal of the constraint 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>
    <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>tech001</contact:id>
      <contact:add>
        <contact:status s="clientUpdateProhibited"/>
      </contact:add>
    </contact:update>
  </update>
  <clTRID>ABC-12345</clTRID>
</command>
</epp>
```

5.1.2.3 Request (change of consentForPublishing of a 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>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>

5.1.2.4 Response (change requested not possible due to *clientUpdateProhibited* constraint)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="2304">
      <msg lang="en">Object status prohibits operation</msg>
      <extValue>
        <value>
          <reasonCode xmlns="">8008</reasonCode>
          </value>
          <reason lang="en">Contact has status
            clientUpdateProhibited</reason>
        </extValue>
      </result>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE1053012304</svTRID>
    </trID>
  </response>
</epp>
```

5.1.2.5 Response (change of removal of constraint not possible because constraint is *NOT* associated with the Contact)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="2308">
      <msg lang="en">Data management policy violation</msg>
      <value>
        <status xmlns:domain="urn:ietf:params:xml:ns:contact-1.0">clientDeleteProhibited</status>
      </value>
      <extValue>
        <value>
          <reasonCode xmlns="">8015</reasonCode>
          </value>
          <reason lang="en">Status to remove is not associated with
            contact</reason>
        </extValue>
      </result>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE3335676366</svTRID>
    </trID>
  </response>
</epp>
```

```

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

```

5.1.2.6 Response (change not possible because the registrar does not sponsor the Contact)

```

<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="2308">
      <msg lang="en">Data management policy violation</msg>
      <value>
        <id xmlns:domain="urn:ietf:params:xml:ns:contact-1.0">MM001</id>
      </value>
      <extValue>
        <value>
          <reasonCode xmlns="">8050</reasonCode>
          </value>
          <reason lang="en">Contact is not sponsored by the registrar</reason>
        </extValue>
      </result>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE3051043623</svTRID>
    </trID>
  </response>
</epp>

```

5.1.2.7 Response (change executed)

```

<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <msgQ count="9" id="227">
      <qDate>2008-02-25T06:40:01+01:00</qDate>
      <msg lang="en">Domain transfer has been requested: pendingTransfer is started</msg>
    </msgQ>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE0115320300</svTRID>
    </trID>
  </response>
</epp>

```

5.1.3 Delete Contact

5.1.3.1 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>
    <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>mb001</contact:id>
      </contact:delete>
    </delete>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

5.1.3.2 Response (cancellation not possible because Contact is associated with some domains)

```
<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="2305">
  <msg lang="en">Object association prohibits operation</msg>
= <extValue>
= <value>
  <reasonCode xmlns="">8005</reasonCode>
  </value>
  <reason lang="en">Contact is associated with
    domains</reason>
  </extValue>
</result>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>MA1440163023</svTRID>
</trID>
</response>
</epp>
```

4.1.3.3 Response (cancellation executed)

```

<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <msgQ count="9" id="227">
      <qDate>2008-02-25T06:40:01+01:00</qDate>
      <msg lang="en">Domain transfer has been requested:
        pendingTransfer is started</msg>
    </msgQ>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE4171511344</svTRID>
    </trID>
  </response>
</epp>

```

5.2 Creating and changing Domain objects

5.2.1 Create Domain

5.2.1.1 Request (creation of a domain with subordinated nameservers *)

```

<?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>super.it</domain:name>
        <domain:period unit="y">1</domain:period>
        <domain:ns>
          <domain:hostAttr>
            <domain:hostName>ns1.super.it</domain:hostName>
            <domain:hostAddr ip="v4">192.0.2.1</domain:hostAddr>
          </domain:hostAttr>
          <domain:hostAttr>
            <domain:hostName>ns2.super.it</domain:hostName>
            <domain:hostAddr ip="v4">192.0.2.2</domain:hostAddr>
          </domain:hostAttr>
        </domain:ns>
        <domain:registrant>mm001</domain:registrant>
      </domain:create>
    </create>
  </command>
</epp>

```

```

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

```

* in this case the IP addresses of the nameservers need to be specified (glue record)

5.2.1.2 Response (the domain has been created and put in DnsHold while waiting for DNS configuration to be validated)

```

<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1001">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:creData 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>super.it</domain:name>
        <domain:crDate>2008-04-16T11:43:32+01:00</domain:crDate>
        <domain:exDate>2009-04-16T22:59:59+01:00</domain:exDate>
      </domain:creData>
    </resData>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE1726130025</svTRID>
    </trID>
  </response>
</epp>

```

5.2.1.3 Response (creation of a domain with a registrant which has not been created as a registrant)

```

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

```

```

= <result code="2308">
  <msg lang="en">Data management policy violation</msg>
  = <value>
    <registrant xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">CL007</registrant>
  </value>
  = <extValue>
    = <value>
      <reasonCode xmlns="">8030</reasonCode>
    </value>
    <reason lang="en">Contact is not a registrant</reason>
  </extValue>
</result>
= <msgQ count="561" id="13410">
  <qDate>2009-01-20T15:26:26+01:00</qDate>
  <msg lang="en">Domain has been deleted</msg>
</msgQ>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE7026330253</svTRID>
</trID>
</response>
</epp>

```

5.2.1.4 Request (creation of a domain with non subordinated nameservers)

```

<?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>m.dns.it</domain:hostName>
  </domain:hostAttr>
  <domain:hostAttr>
    <domain:hostName>j.dns.it</domain:hostName>
  </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>
  <clTRID>ABC-12345</clTRID>
</command>
</epp>

```

5.2.1.5 Request (creation of a domain by breaking the constraint “if Registrant is type 1 then must coincide with the contact Admin”)

```

<?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>giove.it</domain:name>
        <domain:period unit="y">1</domain:period>
        <domain:ns>
          <domain:hostAttr>
            <domain:hostName>r.dns.it</domain:hostName>
          </domain:hostAttr>
          <domain:hostAttr>
            <domain:hostName>j.dns.it</domain:hostName>
          </domain:hostAttr>
        </domain:ns>
        <domain:registrant>mm001</domain:registrant>
        <domain:contact type="admin">c1001</domain:contact>
        <domain:contact type="tech">mb001</domain:contact>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:create>
    </create>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>

```

5.2.1.6 Response (creation of a domain breaking constraint “Registrant of type 1 must coincide with the contact Admin”)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="2308">

```

```

<msg lang="en">Data management policy violation</msg>
= <value>
  <registrant xmlns:domain="urn:ietf:params:xml:ns:domain-
    1.0">MM001</registrant>
</value>
= <extValue>
  = <value>
    <reasonCode xmlns="">8029</reasonCode>
    </value>
    <reason lang="en">Registrant: registrant with the entity type
      = 1 and admin are different</reason>
  </extValue>
</result>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE4303213734</svTRID>
</trID>
</response>
</epp>

```

5.2.2 Update Domain

The policies of the EPP server of the NIC-IT do not allow Update Domain commands that simultaneously involve any combinations, including pairs, of the following three situations:

- *change of registrant*
- *change in DNS configuration i.e. changes of name servers*
- *change in status*

Changes that affect the contacts associated with the authInfo are however allowed that take place with any of the three changes above.

The policies of the EPP server of the NIC-IT do not allow information belonging to the registrant extension to be changed individually or all together once they have been set. Registrars have two ways to set registrant information.

- when creating the contact with a Create Contact; in this way the contact is registered as a potential registrant of some domains;
- with a change that is made after the creation via an Update Contact; in this way the contact, initially recorded as tech and / or admin, can then be associated a registrant of some domains.

Note: Contacts that report the extension of the registrant can be associated as tech or admin of some domains, obviously it is not possible to associate contacts without such extension as registrants.

For what concerns the possibility to change a DNS configuration, it is always related to an existing and correct DNS configuration. In particular, we could distinguish two cases:

- ***If the domain is in the status inactive/dnsHold, since there isn't an existing and correct DNS configuration but only a configuration currently under checking, in order to perform a change to the configuration itself, the <add> section of the Update Domain request must report all the name servers of the new complete configuration. For example, if a domain has been previously created with the nameserver1 and nameserver2 as name servers and, subsequently, the registrar wants to replace nameserver2 with nameserver3, the <add>***

section of the Update Domain request must report both nameserver1 and nameserver3. The name servers must report the IP addresses if they are subordinated to the domain. The <rem> section must be empty. This rule is valid for all the subsequent Update Domain submitted when the domain is in this status.

- **If the domain is in the status pendingUpdate**, since there are two DNS configurations, one is the correct existing one and the other is the one under checking, in order to perform a change to the configuration itself, the requested changes are related to the former. Let's make an example with the following scenario:
 - a domain is in the ok status and has a DNS configuration reporting nameserver1 and il nameserver2 as name servers;
 - the domain is passed in the status pendingUpdate as a consequence of an Update Domain request to replace nameserver2 with nameserver3;

then a new Update Domain request to replace nameserver2 with nameserver4 instead of nameserver3 must report nameserver4 in the <add> section and nameserver2 in the <rem> section.

The Update Domain samples to request a change to a DNS configuration are related to a domain in the status **ok**.

5.2.2.1 Request (change registrant)

```
<?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>pippo2.it</domain:name>
        <domain:chg>
          <domain:registrant>reg002</domain:registrant>
          <domain:authInfo>
            <domain:pw>New22fooBAR</domain:pw>
          </domain:authInfo>
        </domain:chg>
      </domain:update>
    </update>
    <clTRID>ABC-12345</clTRID>
  </command>
</epp>
```

NOTE

- At the same time as the registrant is changed, a change of AuthInfo must also be made.

- If the new registrant is type 1, if a new admin is not specified at the same time then the server forces a new admin to the specified contact as registrant, as reported in the subsequent command.
- The EPP protocol allows the AuthInfo to be removed by specifying within the <domain:authInfo> tag a <domain:null> tag. This CANNOT be done in the implementation of the EPP server of the NIC-IT. If the EPP server receives a remove authInfo, then the following would be returned error 2003 "Required parameter missing"

5.2.2.2 Request (change registrant and admin at same time)

```
<?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>pippo2.it</domain:name>
      <domain:add>
        <domain:contact type="admin">reg002</domain:contact>
      </domain:add>
      <domain:rem>
        <domain:contact type="admin">dup869-reg001</domain:contact>
      </domain:rem>
      <domain:chg>
        <domain:registrant>reg002</domain:registrant>
        <domain:authInfo>
          <domain:pw>New22fooBAR</domain:pw>
        </domain:authInfo>
      </domain:chg>
    </domain:update>
  </update>
  <clTRID>ABC-12345</clTRID>
</command>
</epp>
```

5.2.2.3 Response (change type 1 registrant not possible because a new admin that is not type 1 has been specified at the same time)

```
<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="2308">
  <msg lang="en">Data management policy violation</msg>
```

```

= <value>
  <registrant xmlns:domain="urn:ietf:params:xml:ns:domain-
    1.0">REG002</registrant>
</value>
= <extValue>
  = <value>
    <reasonCode xmlns="">8029</reasonCode>
    </value>
    <reason lang="en">Registrant: registrant with entity type = 1
      and admin are different</reason>
    </extValue>
</result>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE1347117637</svTRID>
</trID>
</response>
</epp>

```

5.2.2.4 Response (removal of contact not executed because the contact is not associated with the domain)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
  = <response>
    = <result code="2308">
      <msg lang="en">Data management policy violation</msg>
      = <value>
        <contact xmlns:domain="urn:ietf:params:xml:ns:domain-
          1.0">reg005</contact>
        </value>
      = <extValue>
        = <value>
          <reasonCode xmlns="">9029</reasonCode>
          </value>
          <reason lang="en">Contact to remove is not associated with
            the domain</reason>
          </extValue>
        </result>
      = <trID>
        <clTRID>ABC-12345</clTRID>
        <svTRID>DE4110637551</svTRID>
        </trID>
      </response>
    </epp>

```

5.2.2.5 Request (removal of a name server)

In all changes to name servers that request the removal of a name server, just the name of the name server that should be removed needs to be reported without adding the list of IP addresses associated with 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>pippo2.it</domain:name>
      <domain:rem>
        <domain:ns>
          <domain:hostAttr>
            <domain:hostName>ns1.pippo2.it</domain:hostName>
          </domain:hostAttr>
        </domain:ns>
      </domain:rem>
    </domain:update>
  </update>
  <clTRID>ABC-12345</clTRID>
</command>
</epp>

```

5.2.2.6 Response (removal of a name server failed because the number of name servers would be insufficient)

```

<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="2308">
      <msg lang="en">Data management policy violation</msg>
      <extValue>
        <value>
          <reasonCode xmlns="">9005</reasonCode>
        </value>
        <reason lang="en">Too few name servers</reason>
      </extValue>
    </result>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE0731646543</svTRID>
    </trID>
  </response>
</epp>

```

5.2.2.7 Request (removal of a name server in use at same time as addition of a new name server)

```

<?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>pippo2.it</domain:name>
      <domain:add>
        <domain:ns>
          <domain:hostAttr>
            <domain:hostName>ns3.pippo2.it</domain:hostName>
            <domain:hostAddr ip="v4">193.205.245.7</domain:hostAddr>
          </domain:hostAttr>
        </domain:ns>
      </domain:add>
      <domain:rem>
        <domain:ns>
          <domain:hostAttr>
            <domain:hostName>ns1.pippo2.it</domain:hostName>
          </domain:hostAttr>
        </domain:ns>
      </domain:rem>
    </domain:update>
  </update>
  <clTRID>ABC-12345</clTRID>
</command>
</epp>

```

5.2.2.8 Request (change to IP addresses of a name server)

The removal or addition of one more IP addresses of a name server is done in the same way as the removal of the name server that has the IP addresses to change and the simultaneous addition of the same name server with the configuration of the final addresses that reports all the IP addresses including those that have not been 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>pippo2.it</domain:name>
      <domain:add>

```

```

    <domain:ns>
      <domain:hostAttr>
        <domain:hostName>ns3.pippo2.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.pippo2.it</domain:hostName>
      </domain:hostAttr>
    </domain:ns>
  </domain:rem>
</domain:update>
</update>
<clTRID>ABC-12345</clTRID>
</command>
</epp>

```

5.2.2.9 Response (removal of a name server in use at same time as addition of new name server - the operation is completed but pending because the DNS Check on the added name sever is being carried out)

```

<?xml version="1.0" encoding="UTF-8" ?>
<= 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">
  <= <response>
    <= <result code="1001">
      <msg lang="en">Command completed successfully; action
        pending</msg>
    </result>
    <= <msgQ count="9" id="227">
      <qDate>2008-02-25T06:40:01+01:00</qDate>
      <msg lang="en">domain transfer requested</msg>
    </msgQ>
    <= <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE6011560173</svTRID>
    </trID>
  </response>
</epp>

```

5.2.2.10 Request (addition of a status without an associated message)

```

<?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>pippo2.it</domain:name>
      <domain:add>
        <domain:status s="clientUpdateProhibited"/>
      </domain:add>
    </domain:update>
  </update>
  <clTRID>ABC-12345</clTRID>
</command>
</epp>

```

5.2.2.11 Response (addition of a status without an associated message)

```

<?xml version="1.0" encoding="UTF-8" ?>
<= <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">
  = <response>
  = <result code="1000">
    <msg lang="en">Command completed successfully</msg>
  </result>
  = <extension>
    = <extdom:chgStatusMsgData
      xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-1.0"
      xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0
        extdom-1.0.xsd">
      <extdom:name>pippo2.it</extdom:name>
    = <extdom:targetStatus>
      <domain:status
        xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
        s="clientUpdateProhibited" lang="en" />
      </extdom:targetStatus>
    </extdom:chgStatusMsgData>
  </extension>
  = <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>DE5463466244</svTRID>
  </trID>
  </response>
</epp>

```

5.2.2.12 Request (addition of a status with an associated message)

```

<?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>pippo2.it</domain:name>
        <domain:add>
          <domain:status s="clientUpdateProhibited">Message di prova
        </domain:status>
        </domain:add>
      </domain:update>
    </update>
  </command>
</epp>

```

5.2.2.13 Request (removal of a status)

```

<?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>pippo2.it</domain:name>
          <domain:rem>
            <domain:status s="clientUpdateProhibited"/>
          </domain:rem>
        </domain:update>
      </update>
    </command>
  </epp>

```

5.2.2.14 Response (removal of a status)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
= <response>
= <result code="1000">
  <msg lang="en">Command completed successfully</msg>
</result>
= <extension>

```

```

= <extdom:chgStatusMsgData
  xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-1.0"
  xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0
  extdom-1.0.xsd">
  <extdom:name>pippo2.it</extdom:name>
= <extdom:targetStatus>
  <domain:status
    xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
    s="ok" lang="en" />
  </extdom:targetStatus>
</extdom:chgStatusMsgData>
</extension>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE1166620346</svTRID>
</trID>
</response>
</epp>

```

5.2.2.15 Request (restore a 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>
<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>pippo.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>

```

NOTE

- A domain is restored as an extension of a normal request for Update Domain using the *rgp-1.0.xsd* schema and the interactions between client and server described in RFC "Domain Registry Grace Period Mapping for the Extensible Provisioning Protocol (EPP)". The EPP server of the NIC-IT implements the following grace periods:

- **auto renew period:** i.e. the grace period following the automatic renewal of a domain when its validity expires
- **redemption period:** i.e. the grace period following the client's Reception of a Delete Domain request for a certain period. Unlike what is specified in the above-mentioned RFC, the EPP server of the NIC-IT does not require the client to send a report to justify the request to restore a domain that has previously been subject to a Delete Domain. The effect of a restore is to immediately recover the domain that is reported in the status before the Reception of the Delete Domain.

5.2.2.16 Risposta (restore a domain)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <extension>
      <extdom:chgStatusMsgData
        xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-1.0"
        xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0
          extdom-1.0.xsd">
        <extdom:name>pippo.it</extdom:name>
        <extdom:targetStatus>
          <domain:status
            xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
            s="ok" lang="en" />
          </extdom:targetStatus>
        </extdom:chgStatusMsgData>
      </extension>
    <trID>
      <clTRID>ABC-12345</clTRID>
      <svTRID>DE3510161705</svTRID>
    </trID>
  </response>
</epp>
```

5.2.3 Delete Domain

5.2.3.1 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>
<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>pippo2.it</domain:name>
</domain:delete>
</delete>
<clTRID>ABC-12345</clTRID>
</command>
</epp>

```

5.2.3.2 Response

```

<?xml version="1.0" encoding="UTF-8" ?>
=<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">
=<response>
=<result code="1000">
<msg lang="en">Command completed successfully</msg>
</result>
=<extension>
=<extdom:chgStatusMsgData
xmlns:extdom="http://www.nic.it/ITNIC-EPP/extdom-1.0"
xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0
extdom-1.0.xsd">
<extdom:name>pippo2.it</extdom:name>
=<extdom:targetStatus>
<domain:status
xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
s="pendingDelete" lang="en" />
<rgp:rgpStatus xmlns:rgp="urn:ietf:params:xml:ns:rgp-
1.0" s="redemptionPeriod" lang="en" />
</extdom:targetStatus>
</extdom:chgStatusMsgData>
</extension>
=<trID>
<clTRID>ABC-12345</clTRID>
<svTRID>DE0673741712</svTRID>
</trID>
</response>
</epp>

```

5.2.4 Transfer Domain

The transfer request (op=request) must be submitted with the AuthInfo.

Subsequent commands regarding cancellation (op=cancel), approval (op=approve) and / or non approval (op=reject) of the transfer by the registrar that requested the transfer from that which holds the domain must be submitted without AuthInfo so the domain is thus in pendingTransfer.

5.2.4.1 Request (op = request by registrar different from the sponsoring 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"
  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>pippo2.it</domain:name>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
        </domain:transfer>
      </transfer>
      <clTRID>ABC-12345</clTRID>
    </command>
  </epp>
```

5.2.4.2 Response (op = request)

```
<?xml version="1.0" encoding="UTF-8" ?>
<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">
  <response>
    <result code="1001">
      <msg lang="en">Command completed successfully; action
        pending</msg>
    </result>
    <msgQ count="1" id="226">
      <qDate>2008-02-21T14:15:00+01:00</qDate>
      <msg lang="en">DNS check ended successfully</msg>
    </msgQ>
    <resData>
      <domain:trnData 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>pippo2.it</domain:name>
        <domain:trStatus>pending</domain:trStatus>
        <domain:reID>MARIO-LOFFREDO</domain:reID>
        <domain:reDate>2008-02-
          25T07:40:00+01:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
```

```

        <domain:acDate>2008-03-
          01T23:59:59+01:00</domain:acDate>
      </domain:trnData>
    </resData>
  = <trID>
    <clTRID>ABC-12345</clTRID>
    <svTRID>MA3347230155</svTRID>
  </trID>
</response>
</epp>

```

5.2.4.3 Request (*op = reject by sponsoring registrar of a domain that is undergoing a request for transfer, the request is sent to deny the transfer*)

```

<?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>pippo2.it</domain:name>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
        </domain:transfer>
      </transfer>
      <clTRID>ABC-12345</clTRID>
    </command>
  </epp>

```

5.2.4.4 Response (*op = reject*)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
  = <response>
    = <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    = <msgQ count="3" id="227">
      <qDate>2008-02-25T06:40:01+01:00</qDate>
      <msg lang="en">Domain transfer has been requested:
        pendingTransfer is started</msg>
    </msgQ>
    = <resData>
      = <domain:trnData 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>pippo2.it</domain:name>
    <domain:trStatus>clientRejected</domain:trStatus>
    <domain:reID>MARIO-LOFFREDO</domain:reID>
    <domain:reDate>2008-02-
      25T07:52:13+01:00</domain:reDate>
    <domain:acID>DEMO-REGISTRAR</domain:acID>
    <domain:acDate>2008-02-
      25T07:53:30+01:00</domain:acDate>
  </domain:trnData>
</resData>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE2506001343</svTRID>
</trID>
</response>
</epp>

```

5.2.4.5 Request (op = cancel by registrar that previously made the Transfer Request 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="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>pippo2.it</domain:name>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
        </domain:transfer>
      </transfer>
      <clTRID>ABC-12345</clTRID>
    </command>
  </epp>

```

5.2.4.6 Response (op = cancel)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
  = <response>
    = <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    = <msgQ count="1" id="226">
      <qDate>2008-02-21T14:15:00+01:00</qDate>
      <msg lang="en">DNS check ended successfully</msg>
    </msgQ>
  </response>
</epp>

```



```

</msgQ>
= <resData>
  = <domain:trnData 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>pippo2.it</domain:name>
    <domain:trStatus>clientCancelled</domain:trStatus>
    <domain:reID>MARIO-LOFFREDO</domain:reID>
    <domain:reDate>2008-02-25T07:40:00+01:00</domain:reDate>
    <domain:acID>DEMO-REGISTRAR</domain:acID>
    <domain:acDate>2008-02-25T07:49:32+01:00</domain:acDate>
  </domain:trnData>
</resData>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>MA5645351527</svTRID>
</trID>
</response>
</epp>

```

5.2.4.7 Request (op = approval by old registrar to accept transfer)

```

<?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>pippo2.it</domain:name>
        <domain:authInfo>
          <domain:pw>22fooBAR</domain:pw>
        </domain:authInfo>
        </domain:transfer>
      </transfer>
      <clTRID>ABC-12345</clTRID>
    </command>
  </epp>

```

5.2.4.8 Response (op = approve)

```

<?xml version="1.0" encoding="UTF-8" ?>
= <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">
  = <response>
    = <result code="1000">
      <msg lang="en">Command completed successfully</msg>

```

```

</result>
= <msgQ count="5" id="227">
  <qDate>2008-02-25T06:40:01+01:00</qDate>
  <msg lang="en">Domain transfer has been requested:
    pendingTransfer is started</msg>
</msgQ>
= <resData>
  = <domain:trnData 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>pippo2.it</domain:name>
    <domain:trStatus>clientApproved</domain:trStatus>
    <domain:reID>MARIO-LOFFREDO</domain:reID>
    <domain:reDate>2008-02-
      25T07:54:21+01:00</domain:reDate>
    <domain:acID>MARIO-LOFFREDO</domain:acID>
    <domain:acDate>2008-02-
      25T07:54:49+01:00</domain:acDate>
  </domain:trnData>
</resData>
= <trID>
  <clTRID>ABC-12345</clTRID>
  <svTRID>DE3545144076</svTRID>
</trID>
</response>
</epp>

```

5.2.5 Transfer-Trade Domain

A request for transfer and a change of registrant can be made with the same command. The command is similar to the request for transfer but with an extension that allows a request to be made for a change of registrant (and of authInfo).

5.2.5.1 Request (*op = request by registrar different from the sponsoring 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"
  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>pippo.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-1.0"

```

```

        xsi:schemaLocation="http://www.nic.it/ITNIC-EPP/extdom-1.0 extdom-1.0.xsd">
        <extdom:transferTrade>
        <extdom:newRegistrant>ml001</extdom:newRegistrant>
        <extdom:newAuthInfo>
        <extdom:pw>NEW2fooBAR</extdom:pw>
        </extdom:newAuthInfo>
        </extdom:transferTrade>
    </extdom:trade>
</extension>
<c|TRID>ABC-12345</c|TRID>
</command>
</epp>

```

5.2.5.2 Response (op = request)

```

<?xml version="1.0" encoding="UTF-8" ?>
<= 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">
  = <response>
    = <result code="1001">
      <msg lang="en">Command completed successfully; action
        pending</msg>
    </result>
    = <msgQ count="15" id="96">
      <qDate>2008-04-29T12:15:30+02:00</qDate>
      <msg lang="en">Domain transfer has been executed</msg>
    </msgQ>
    = <resData>
      = <domain:trnData 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>pippo.it</domain:name>
        <domain:trStatus>pending</domain:trStatus>
        <domain:reID>MARIO-LOFFREDO</domain:reID>
        <domain:reDate>2008-04-
          30T17:00:22+02:00</domain:reDate>
        <domain:acID>DEMO-REGISTRAR</domain:acID>
        <domain:acDate>2008-05-
          05T23:59:59+02:00</domain:acDate>
      </domain:trnData>
    </resData>
    = <trID>
      <c|TRID>ABC-12345</c|TRID>
      <svTRID>MA2246562762</svTRID>
    </trID>
  </response>
</epp>

```

The approval by the "old" registrar is made with the usual Transfer command (op=approve) which not only causes the transfer but also the change of registrant. If unsuccessful or if the transfer is cancelled the change of registrant does not take place.

If the new registrant (in the example *m1001*) is a natural person (entityType equal to 1) also the Admin new contact will be forced (without the need to specify it) to be the same as the new registrant.

5.2.6 Pending actions

The EPP server of the NIC-IT allows for three types of pending actions:

- Creation of a domain with validated DNS configuration
 - Change of DNS configuration of an existing domain
 - Transfer (either with or without a simultaneous change of registrant) of an existing domain
- Pending action involving operations on clients are not allowed.

Both successful and unsuccessful terminations of pending actions are notified by a message that the server inserts in the polling code.

5.2.7 Periods

For some transitions of status and for the management of some information regarding objects in the database (registrars, contacts, domains) the synchronous server of the it registry uses temporal periods.

The temporal periods are reported below:

Name	Meaning	Unit	Value
DNS_HOLD_PERIOD	Maximum period in <i>inactive/dnsHold</i>	DD	30
PENDING_UPDATE_PERIOD	Maximum period in <i>pendingUpdate</i>	DD	5
REDEMPTION_PERIOD	Maximum period in <i>pendingDelete/redemptionPeriod</i>	DD	30
PENDING_TRANSFER_PERIOD	Maximum period in <i>pendingTransfer</i>	DD	5
AUTO_RENEW_PERIOD	Grace period after automatic renewal of domain	DD	15
PENDING_DELETE_PERIOD	Maximum period in <i>pendingDelete/pendingDelete</i>	DD	5 max
CHALLENGED_PERIOD	Maximum period in <i>challenged</i>	DD	180
REVOKED_PERIOD	Maximum period in <i>inactive/revoked</i>	DD	30
TO_BE_REASSIGNED_PERIOD	Maximum period in <i>inactive/toBeReassigned</i>	DD	30
NO_REGISTRAR_PERIOD	Maximum period in <i>inactive/noRegistrar</i>	DD	60
NOT_RENEWED_PERIOD	Maximum period in <i>inactive/notRenewed</i>	DD	30
UNLINKED_CONTACT_PERIOD	Maximum period in which a contact can be disconnected	DD	60
BILLING_LOW_CREDIT_PERIOD	Time interval for calculating the minimum credit that a registrar must have to maintain domains. The registrar must have the credit needed to renew any domains in Expiry from the current date for the period in question.	DD	15
BILLING_LOW_CREDIT_WARNING_PERIOD	Time interval for calculating the data in which the server warns the client that the minimum credit threshold is being encroached.	DD	7
PASSWD_VALIDITY_PERIOD	Validity period of password	DD	180
PASSWD_REMINDER_PERIOD	Time interval before password expires in which the server reminds client of imminent expiry of the password	DD	15
OLD_MESSAGE_PERIOD	Maximum period of a message in the polling	DD	60

	code		
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	mm	60

5.2.8 Other useful parameters

The table below shows other parameters that may be useful for a client when interacting with the synchronous server of the Registry.

Name	Meaning	Value
MIN_IP	Minimum number of IP addresses per name server	1
MAX_IP	Maximum number of IP addresses per name server	1
MIN_NS	Minimum number of name servers per domain	2
MAX_NS	Maximum number of name servers per domain	6
MIN_CONTACT_TECH	Minimum number of tech contacts associated with the domain	1
MAX_CONTACT_TECH	Maximum number of tech contacts associated with the domain	6
MIN_CONTACT_ADMIN	Minimum number of admin contacts associated with the domain	1
MAX_CONTACT_ADMIN	Maximum number of admin contacts associated with the domain	1
MAX_CMD	Maximum number of Check Domain commands a day that can be submitted to the server pub-test.nic.it	6000
	Maximum number of Check Domain commands a day that can be submitted to the server epp-deleted-pub-test.nic.it	3000
	Maximum number of Create Domain commands a day that can be submitted to the epp-deleted-pub-test.nic.it	
MAX_CHECK	Maximum number of domains reported in a Check Domain	5
MIN_PWAUTHINFO_LENGTH	Minimum length of domain authInfo	8
MAX_PWAUTHINFO_LENGTH	Maximum length of domain authInfo	32
MIN_PWUSER_LENGTH	Minimum length of user password	6
MAX_PWUSER_LENGTH	Maximum length of user password	16
USER_SESSIONS_LIMIT	Maximum number of simultaneous sessions active per registrar	5
USER_SESSION_TIMEOUT	Length of the session timeout reported in minutes	30