



Quick Start Guide for Validation Agents



The role of the validation agent

A validation agent's function is to confirm that a registrant (someone who has applied for an ENUM registration) is the legitimate *user* of the phone number that the registration will be based on.

Validation agents work on the basis of validation methods that have been registered with and approved by the registry prior to use. A validation method has to reliably establish:

- whether the phone number in question belongs to the Dutch number plan;
- whether it is a valid e.164 phone number;
- whether the registration applicant is the phone number's legitimate user.

More information about validation and validation methods is given in the Guidelines on the registration of Validation methods, which is available from our website <http://www.enum.nl>.

Multiple organisations act as validation agents. In most cases, a registrar will also be a validation agent and will validate its own registrations. However, a validation agent can also be an independent service provider, working for numerous registrars. The nature of the validation method used varies from one type of organisation to another. For example, a number-holding organisation may use an internal validation method for its own numbers, while other parties may use methods based on call-back or SMS verification.

If validation is successful, the validation agent issues a token to the registrar as confirmation. The registrar then submits the token to the registry when applying to register, transfer or renew a domain registration. Each token is unique to a particular registration (domain name and applicant) and a particular validation agent.

Becoming a validation agent

To become a validation agent, you need to complete and submit the Registrarship and/or Validation Agency Application Form, available from our website <http://www.enum.nl>. The same form is used to apply to become both a registrar and a validation agent. The completed form needs to be sent back to ENUM NL by post.

Before you start operating as a validation agent, you will also need to provide us with the following:

- An X.509 certificate
- Details of at least one validation method that you intend to use

Please note that we cannot accept you as a validation agent until you have provided us with a valid certificate. Once your application has been processed, we will send you a written confirmation. This will include the *handle* (or 'validator ID') that you will be known by on the registration system.

Submitting a certificate

There has to be a valid X.509 certificate on the registration system for every validation agent. This certificate is used to verify the validation information accompanying each application or request submitted by a registrar. It may be self-signed or issued by a CA. You can generate your own X.509 certificate (self-signed) using the scripts in the ENUM tool kit. For details see Section 10 in the Registrar's Manual, which is available from <http://www.enum.nl>. Naturally you can generate a certificate by any method you prefer. You can decide the validity period of the certificate yourself. (A validity period of 12 months is common practice.)



You can send the certificate to us by e-mail (support@enum.nl). In your e-mail, please state the name of your organisation and the validator handle (if known). When sending in a new certificate to replace an existing one, please state the date on which the new certificate should be activated. On receipt of your certificate, we will phone the contact person nominated in your application, to confirm that the e-mail is genuine.

We cannot accept you as a validation agent until you have provided us with a valid certificate.

About validation methods

Every validation must be performed using a method that has been registered with and approved by the registry prior to use. A validation method has to reliably establish:

- whether the phone number in question belongs to the Dutch number plan;
- whether it is a valid e.164 phone number;
- whether the registration applicant is the phone number's legitimate user.

For registration purposes, it is also necessary to confirm the identity of the applicant. If the registrar (the party that operates the registration process and submits the registration application to ENUM NL) is also the validation agent (the party that makes the validation), it makes sense to confirm the identity of the applicant as part of the validation process.

ENUM NL has defined a number of model validation methods to help validation agents define the methods that they intend to use. The model validation methods are *not* blueprints that validation agents are required to follow; agents are entirely free to develop and put forward their own methods. You may modify one of the models or develop a completely different method of your own.

More information about validation and validation methods is given in the Validation Methods Handbook, which is available from our website <http://www.enum.nl>.

Registering a validation method

On our website <http://www.enum.nl>, you will find various forms for the registration of validation methods. Most are for use when registering a method based on a predefined model. However, there is also a form – the one entitled 'Non-standard Validation Method' – that can be used to register a method of your own or a modified version of a model method. For each type of form, a set of guidance notes – complete with instructions on how to fill in the form – are provided.

The validation method registration process is a paper-based process. If you use one of the model methods without modification, you can send the form to us by post. Provided everything is in order, we will write back to you confirming acceptance of the method and giving you the handle by which the method is known on the registration system. You will need this handle to generate validation tokens.

If you use a modified model method, or if you develop an entirely different method, we suggest that you first send us a draft description by e-mail (support@enum.nl). Your method will undergo thorough manual assessment and any feedback will be sent by e-mail.

Following assessment of the draft description, you can submit the formal documentation by post. Provided everything is in order, we will write back to you confirming acceptance of the method and giving you the handle by which the method is known on the registration system. You will need this handle to generate validation tokens.



Validation and the generation of tokens

Validation agents work on the basis of validation methods that have been registered with and approved by the registry prior to use. If an applicant's details are successfully validated, the details are signed with the agent's *private key*. The signed details and the *signature* together form a validation token. The *signature* can be verified using the agent's *public key* (the certificate given to the registry).

This validation token specifies the domain name (phone number), number user (name), validation agent (handle), validation method (handle), registrar (handle), validation date and expiry date. More information about validation tokens is given in the Registrar's Manual, in Section 9 ('Validation') and subsection 5.3.4 ('Token type object'). The Registrar's Manual is available from our website <http://www.enum.nl>.

You can generate validation tokens using the scripts in the ENUM tool kit. For details see Section 10 in the Registrar's Manual. Naturally you can generate tokens by any other method you prefer.

The registrar has to submit a current validation token to the registry with every registration, transfer or renewal request. The registrar and the validation agent decide between them how tokens will be issued to the registrar. No special security measures are required, because the content and issuer of the token are confirmed by the signature.

Working with registrars and the registry

A validation agent deals directly with the registry in connection with:

- Enrolment as a validation agent
- The certificate
- The validation methods

All contact regarding the actual registrations and validations is through a registrar.

If there is reason to believe that a validation method may not be reliable (if, for example, a complaint is made regarding an abusive registration), the registry will contact the validation agent directly to investigate the matter.

Information, enquiries and contact

Comprehensive information and the latest versions of all forms and documentation are available from our website:

<http://www.enum.nl>

Contact details for ENUM NL's Registration & Services Department:

E-mail support@enum.nl
Phone (+31) (0)26 352 5555 (select option 3)
 Lines open on working days from 8am to 6pm (CET)

General contact details for ENUM NL

Address for callers Utrechtseweg 310, 6812 AR ARNHEM, The Netherlands
Postal address Postbus 5022, 6802 EA ARNHEM, The Netherlands
Phone (+31) (0)26 352 5500
Fax (+31) (0)26 352 5575
E-mail support@enum.nl