



## **Technical requirements for the registration of .nl domain names**

Every domain name must satisfy the following technical requirements:

1. All Internet standards that are generally recognised within the industry must be complied with. This implies compliance with at least the IETF RFCs 1034, 1035, 1123 and 2181. Where relevant, standards covering particular applications or resource records must also be complied with. Informational RFCs, such as RFC 1912, and other Best Common Practice RFCs are also applicable. The following requirements supplement or specify the provisions of the above-mentioned standards.
2. A domain name or subdomain name may contain only letters, numbers and hyphens and must comply with the following rules:
  - Hyphens may be used only between letters and/or numbers.
  - A domain name label must consist of at least two characters.
  - A domain name must contain no more than 63 characters.
3. For each domain included in the .nl zone file, there must be a primary name server and at least one secondary name server. The name servers specified for inclusion in the .nl zone file should be redundant machines on separate (sub)networks.
4. The name servers specified for inclusion in the .nl zone file must be accessible from anywhere on the Internet using IPv4 and preferably also IPv6.
5. The name servers specified for inclusion in the .nl zone file must be accessible from anywhere on the Internet using UDP port 53 and TCP port 53. If the domain name generates query responses more than 512 octets long, the EDNS0 protocol (RFC 2671) must also be supported.
6. Once a domain has been added to the .nl zone file, the .nl zone file manager checks all the associated name servers, including name servers that are not specified, but are (or appear to be) included in the zone file of the relevant domain. The checks will address (but may not be limited to) the following points:
  - a. The zone file NS records must include at least the specified name servers.
  - b. The primary data source specified in the MNAME field of the SOA record must be a valid host name.
  - c. The MNAME field in the SOA record and the NS and MX records must point to objects with A records (and possibly AAAA records), not to objects with CNAME records.
  - d. The RNAME field in the SOA record must follow the syntax referred to in RFC 1912, section 2.2, and must yield a clear, valid e-mail address that accepts mail.
  - e. The TTL values of the NS records of the name servers included in the .nl zone must not be less than 7200 (2 hours) to prevent unnecessary querying of the .nl zone in the event of misconfigurations. Since such records represent important infrastructure components, which will not be modified quickly without preparation, a default TTL value of 172800 (48 hours) is recommended.
  - f. The expire value in a zone's SOA record must be between 604800 (7 days) and 3456000 (40 days). SIDN's administrative arrangements (e.g. quarantine periods) assume a value in this range. The expire value of a zone must be at least seven times the refresh value, and the retry value of a zone must never be greater than the refresh value.



- g. In compliance with the standards, for every name server host at any subdomain level within the .nl domain, there must be a glue (A and possibly AAAA) record in the NL zone file.
- h. If a name server for a domain is running on a host operated by the relevant registrar, the canonical host name used by the registrar must be included in the zone file and must be specified; it is not acceptable to include an alias of the domain name in question. This is to avoid littering of the .nl zone file with unnecessary glue records and to prevent problems arising if the IP address of such a name server is changed.