Best Practice: Design of DOI names, version 1.0

This paper is a guide to the optimal design of your DOI-name. It provides relevant information, recommendations and useful examples.

A Digital Object Identifier (DOI) is a permanent, persistent identifier used for citing and linking electronic resources (texts, research data or other content). Updated, structured metadata is assigned to the document using the DOI name.

The DOI-name is comprised of a unique alphanumeric character sequence. The syntax of a DOI-name consists of a prefix and a suffix. Both are separated by a forward slash ("/").

Prefixes are assigned by the DOI Foundation via DataCite. The suffix is agreed by the publication agent in conjunction with da|ra. An automatic generation via da|ra is possible as well. The suffix is arranged and declared in the form and following general structure conformable to § 2 of the Service Level Agreements (SLA):

1. XX registers objects at the [study-level. i.e. one DOI name can be linked with several data sets of a certain study.] [...] Changes in level of granularity are possible by prior agreement with da|ra.
2. XX is assigned the DOI-prefix “10.yyyy”
3. Suffixes have the following agreed structure: /...
4. Every suffix allotted within this prefix has to be unique

Please note the following recommendations for the design of DOI-names:

The suffix should be an opaque string, which is composed of
- a sequential number or
- an internal identifier (number).

Prefix and suffix are not constrained in their length. As the DOI-name can also be used as a Uniform Resource Locator (URL) only the following signs are allowed: the letters A-Z as well as a-z, the numbers 0-9, - (hyphen), . (point), _ (underline), : (colon) and / (forward slash, but only in front of an alphanumeric character string). As an illustration some recommendable examples follow.

Examples of DOI-names

The following examples of DOI-names of da|ra publication agents (PA) show you how a suffix can be designed.

<table>
<thead>
<tr>
<th>Complete DOI-name</th>
<th>Prefix</th>
<th>Suffix</th>
<th>PA</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.4232/1.11004</td>
<td>10.4232</td>
<td>1.11004</td>
<td>GESIS</td>
<td>Sequential number</td>
</tr>
<tr>
<td>10.5157/NEPS:SC6:1.0.0</td>
<td>10.5157</td>
<td>NEPS:SC6:1.0.0</td>
<td>NEPS</td>
<td>Semantic part (NEPS), internal Identifier (SC6) and version (1.0.0)</td>
</tr>
<tr>
<td>10.5684/soep.v27</td>
<td>10.5684</td>
<td>soep.v27</td>
<td>SOEP</td>
<td>Semantic part (SOEP) and version (v27)</td>
</tr>
</tbody>
</table>

1 The recommendations are based on the instructions in the official DOI-handbook as well as the notes of the IDF and DataCite.
2 The following signs are not allowed: Language-specific vowels (e. g. ä, Ä, ß), % , # , < , > , }, { , ^ , [ , ] , ‘ , | , \ and spaces