

Best Practice: Assurance of data quality, version 1.0

The assurance of the data quality of registered resources is the responsibility of the publication agent. This is stated under the item "Quality assurance" in the da|ra-Policy:

“The publication agent is responsible for the quality of the contents of objects. The contents should fulfill the quality standards of the publication agent and be valid according to the rules of good scientific practice in the relevant scientific discipline.”¹

It is da|ra a concern to support the publication agents in assuring the quality of the metadata. With this aim da|ra publishes among other things [Best Practice recommendations](#), validates metadata if the web form is used, uses controlled vocabularies according to ISO standard in the metadata schema and provides [advice](#) in various areas of the assurance of metadata quality and citation practice.

The focus however is the self-control and -regulation of the publication agents. Uniform and generally accepted standards for the assurance of data quality have not prevailed so far. Amongst others this is due to the difficulty to agree on a selection and hierarchy of quality criteria and to establish these criteria as binding (Schendera 2007: 13).²

A useful instrument for the self-assessment of data quality is the [Data Seal of Approval](#). It is used primarily in the English-speaking realm, but is also recommendable for the examination of German datasets. The Data Seal of Approval (DSA) ensures that archived data can still be found, recognized and used in the future. The Board of the DSA, which is responsible for the review process and on the further development, consists of members of ICPSR, Nestor, UK Data Archive and DANS.

Further seals and norms for publication agents in the German-speaking realm are:

- The [nestor Seal](#) for Trustworthy Digital Archives
- The [DIN-norm 31644](#) “Criteria for trustworthy digital archives”
- The [ISO-norm 16363](#) “Space data and information transfer systems - Audit and certification of trustworthy digital repositories”

Ultimately, good scientific practice includes the assurance of data and metadata quality. Also one should bear in mind that a lack of the assurance of data quality can lead not only to financial losses, but can also damage the reputation of the data producer. Data quality should therefore be a concern of every producer and provider of data. Here, quality goes before quantity!

Further information and assistance can be found here for example:

- nestor-handbook: A small encyclopedia of digital long-term archiving (only in German)³
- Further topic-relevant DIN norms and ISO standards are for example EN ISO 19114:2005⁴ or DIN 55350-11⁵ of the DIN German Institute for Standardization

¹ da|ra-Policy, version 2.2 from March 4th, 2013

² Schendera, Christian F. G. (2007): Datenqualität mit SPSS. München: Oldenbourg Verlag: 13.

³ Neuroth, H./Oßwald, A./Scheffel, R./Strathmann, S./Huth, K. (Hrsg.) nestor-Hanbuch (version 2.3) online retrievable at [urn:nbn:de:0008-2010071949](http://nbn-resolving.org/urn:nbn:de:0008-2010071949).

⁴ EN ISO 19114:2005 “Geographic information - Quality evaluation procedures”

⁵ DIN 55350-11 “Concepts for quality management”