

# VIRTA Data Content

To ensure the uniformity and quality of publication metadata research organizations need to provide certain required data fields for each publication they store to VIRTA (see chart below). For data collection, the publications are classified based on features such as their format (publication type classification), scientific quality (publication forum) and contents (field of scientific classification). The information can also be supplemented with optional data fields in addition to the required data. The data must also fulfill certain technical criteria. List of all collected fields for each publication can be found [here](#).

Classifications are used to harmonize the knowledge base required for evaluating the publication activities of Finnish research organizations. The purpose of the publication data collected and the classifications applied to them is also to serve as a general national standard for outlining publication activities not only in the monitoring of research activities, but also in materials such as researcher CVs or publication lists attached to funding applications.

As owners of the data the research organizations that produce the data sent to VIRTA are responsible for the validity of the data and for keeping the data updated. After each data transfer the organization receives a message of possible errors so that the data information can be supplemented. Organizations can correct and complement the data at any time. However, for the Ministry of Education and Culture data collection, the data information of the statistical year must be filled within the schedule defined for the yearly data collection.

## Data Content of Virta Publication Information Service

For more detailed information of the collected data see the [list of collected fields for each publication](#).

| Required in the Ministry's publication data collection  |  |   |  |  |
|---|--|---|--|--|
| Required in data transfer <sup>a</sup>  | Optional in data transfer <sup>b</sup>   | Optional in Ministry's data collection  | Other information not included in Ministry's data collection | Information generated automatically in VIRTA   |
| Organization ID<br>Publication ID in organization<br>Publication year<br>Title<br>Authors<br>Publication type<br>Authors in organization<br>ISBN*<br>ISSN*<br>Conference title*<br><br>*) Requirements depend on publication type | Number of authors<br>Scientific field (1-6)<br>International (yes/no)<br>International co-publication (yes/no)<br>Co-publication with a company<br>Open Access<br>Publisher* | Volume<br>Number<br>Pages<br>Article number<br>Journal/series title<br>Country<br>Unit or department<br>Place of publishing<br>Host publication's title<br>Host publication's editors<br>Language<br>DOI<br>Permanent address<br>Source ID<br>Keywords<br>ORCID | Project ID<br>Funder ID<br>Status of the publication         | Reporting year<br>Publication's VIRTA ID<br>Co-publication's VIRTA-ID<br>Publication Forum ID<br>Publication Forum ranking |

| Finnish              | English         | Definition  | More information   | Mandatory field |
|----------------------|-----------------|---|--|-----------------|
| <OrganisaatioTunnus> | Organization ID | Organization ID according to a certain classification                             | ID is 5-8 characters and it is determined according to a certain classification. e.g. <a href="#">Finnish universities</a> | X               |
| <IlmoitusVuosi>      | Reporting year  | The year in which the publication was reported for the first time, 2011 or after. | Reporting year is automatically generated in VIRTA.  |                 |

|                      |   |   |   |   |
|----------------------|---|---|---|---|
| <JulkaisunTilaKoodi> | Status of the publication               | Status of the publication. Value -1,0, 1, 2 or 9  | Values:<br>-1 -> Rejected<br>0 -> Accepted with inadequate data<br>2 -> Accepted with complete data<br><br>9 -> co-publication<br><br><a href="#">Generated automatically in VIRT</a>   |   |
| <JulkaisunOrgTunnus> | Organization-specific ID of publication | The organization's own ID for the publication.  | Free text field, for example sequential numbers, e.g. 2015_0001, 2015_0002, etc.  | X |
| <YksikkoKoodi>       | Organization sub-unit                   | Faculties, departments or units (max. 20) of the organisation with contribution to the publication  | Free text field. Codes defined by the organization  |   |
| <JulkaisuVuosi>      | Publication year                        | The year in which the publication was published for the first time as a version with full bibliographic information.  | A four number digit between 1900–2020   | X |
| <JulkaisunNimi>      | Publication title                       | Publication title as given in the article or the book. If necessary, the title of a foreign-language publication may be transliterated.                                       | Free text field   | X |
| <TekijatiedotTeksti> | Publication authors                     | Authors of the publication in the format and order in which they were listed in the original publication or source database.  | Free text field. Several authors should be separated by semicolon:<br><br>Forename, Surname; Forename, Surname  | X |
| <TekijoidenLkm>      | Number of authors in publication        | The total number of authors in the publication.   | A positive integer, not 0.  |   |
| <SivunumeroTeksti>   | Pages                                   | Publication's page numbers in which the article was published in the same format as in the original article or source database.   | Free text field   |   |
| <Artikkelinnumero>   | Article number                          | Article number used for the publication of the article (if applicable) in the same format as in the original article or source database. (Usually in electronic publications) | Free text field   |   |
| <AvainsanaTeksti>    | Keywords                                | Keywords that describe the content of the publication as accurately as possible.  | Free text field. Several keywords should be separated by semicolon  |   |
| <ISBN>               | ISBN                                    | Publication or parent publication ISBN number.  | Validity is verified by the method described in <a href="http://isbn-information.com/10-digit-isbn.html">http://isbn-information.com/10-digit-isbn.html</a> and <a href="http://isbn-information.com/13-digit-isbn.html">http://isbn-information.com/13-digit-isbn.html</a> |   |

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|-------------------------|----------------------------|--|--|--|
| <JufoTunnus>            | Publication Forum ID       | Publication forum identifier according to the Finnish Publication forum (JUFO-ID) (e. g. 5003).  | <a href="http://www.tsv.fi/julkaisufoorumi/haku.php">http://www.tsv.fi/julkaisufoorumi/haku.php</a><br><br>Generated automatically in VIRT   |  |
| <JufoLuokkaKoodi>       | Publication Forum ranking  | The classification has three levels: 1 = basic; 2 = leading; 3 = top (0 = identified publication channels which have not received level 1)   | <a href="http://www.tsv.fi/julkaisufoorumi/materiaalit/jufo_arviointikriteerit.pdf">http://www.tsv.fi/julkaisufoorumi/materiaalit/jufo_arviointikriteerit.pdf</a><br><br>Generated automatically in VIRT |  |
| <JulkaisumaaKoodi>      | Publishing country         | Country of publication of the journal, series, monograph or parent publication according to the countries 2007 classification of Statistics Finland.   | Value according to the countries 2007 classification of Statistics Finland.  |  |
| <LehdenNimi>            | Journal name               | Journal/series name, as complete as possible, and spelled out (no abbreviations). If the name of a conference article journal/series is unknown, the established conference name will be indicated without the ordinal and year and with no abbreviations. | Free text field  |  |
| <ISSN>                  | ISSN                       | The ISSN number of the series publishing the journal, monograph or parent publication according to the primary printed version. If there is no printed version, the ISSN number of the electronic version will be indicated.                               | Validity is checked. 1-2 ISSN numbers per publication can be   |  |
| <VolyyimiTeksti>        | Volume                     | Volume of the journal or series in which the article appeared.   | Free text field  |  |
| <LehdenNumeroTeksti>    | Issue                      | Issue of the journal or series in which the article appeared.  | Free text field  |  |
| <KonferenssinNimi>      | Conference title           | The established name of the conference repeated in the name of the proceedings publication.  | Free text field  |  |
| <KustantajanNimi>       | Publisher                  | Publisher's name, as complete as possible, and spelled out (no abbreviations).   | Free text field  |  |
| <KustannuspaikkaTeksti> | Place of publishing        | The place or places given in connection with the publication's publisher.  | Free text field  |  |
| <EmojulkaisunNimi>      | Parent publication's title | Name of the edited book in which the article was published.  | Free text field  |  |

|                                   |  |   |   |   |
|-----------------------------------|--|---|---|---|
| <EmojulkaisunToimittajatTeksti>   | Parent publication's editors                               | Editors of an edited publication in the format and order in which they were listed in the original publication or source database.  | Free text field   |   |
| <JulkaisutyyppiKoodi>             | Publication type   | Publication type according to the publication type classification   |   | X |
| <TieteenalaKoodi>                 | Field of science of the publication                        | One to six fields of science in the order of relevance of each field to the publication. The first, so-called primary field of science is mandatory   |   | X |
| <YhteisjulkaisuKVYtkin>           | International co-publication                               | At least one of the author's is affiliated to a foreign organization  | 0 = no, 1 = yes   |   |
| <JulkaisunKansainvalisyysKytin>   | Internationality of publication* (domestic /international) | The publisher of a national publication is the home country of the reporting organization. The publisher of an international publication is not the home country. The publisher of a conference publication refers to the publishing house.               | 0 = no, 1 = yes   |   |
| <JulkaisunKieliKoodi>             | Publication language                                       | The language used to write the publication according to the Languages 2003 classification of Statistics Finland <a href="http://www.stat.fi/meta/luokitukset/kieli/001-2003/index.html">http://www.stat.fi/meta/luokitukset/kieli/001-2003/index.html</a> | <a href="https://virkailija.opintopolku.fi/koodisto-service/rest/kieli/koodi">https://virkailija.opintopolku.fi/koodisto-service/rest/kieli/koodi</a>   |   |
| <AvoinSaatavuusKoodi>             | Open access  | Open access status of the publication   | 0 = No answer<br>1 = Publication published on an open access channel<br>(all publications on the channel are openly accessible)<br>2 = Open access publication published on a hybrid channel (the channel contains both open access and non-open access publications) |   |
| <YhteisjulkaisuYritysytkin>       | Co-publication with a company                              | At least one of the author's is affiliated to a company   | 0=no, 1 =yes  |   |
| <RinnakkaistallennettuKytin>      | Self-archived  | The publication is self-archived in a field-specific or institutional repository  | 0=no, 1 =yes  |   |
| <RinnakkaistallennusOsoiteTeksti> | Self-archived permanent address                            | Permanent address of a self-archived publication (e.g. URL)   | Free text   |   |
| <DOI>                             | DOI  | The Digital Object Identifier (DOI) of the publication.   | Validity is checked. <a href="https://dx.doi.org/">https://dx.doi.org/</a>  |   |

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|--------------------------|----------------------|---|--|---|
| <PysyvaOsoiteTeksti>     | Permanent address    | Website address based on permanent identifiers (e.g. DOI, URN or handle) of the publication that takes the user directly to the full text version of the publication. | Free text field  |   |
| <LahdetietokannanTunnus> | Source database code | Publication identifier or ID number in the database from which its record was harvested (e.g. Web of Science, Scopus, Pubmed, ArXiv, Cab Abstracts, Arto, Fennica).   | Free text field  |   |
| <OrganisaationTekijat>   | Organization authors | Author affiliated in the reporting organisation.  | Free text field. May include several names but at least one is compulsory. Several authors should be separated by semicolon:<br><br>Forename, Surname; Forename, Surname | X |
| <ORCID>                  | ORCID                | ORCID identifiers of authors from the reporting organisation, e.g. 0000-0000-0000-0000, see <a href="http://www.orcid.org">http://www.orcid.org</a>                   | e.g. 0000-0000-0000-0000, see <a href="http://www.orcid.org">http://www.orcid.org</a>  |   |