Ministry of Education and Culture Publication Data Collection Manual 2014

1.1	Publication data collection	2
2 Clas	ssifications	20
2.1	Statistics Finland's educational institution ID	20
	Field of education classification 1995	20
2.3	Field of education classification 2002	21
	Fields of science classification	21
2.5	Types of publication	24

1.1 Publication data collection

In its data collection for 2010, the Ministry of Education and Culture introduced a new publication type classification that is common to the entire higher education sector (see section 2.5). This classification system was developed in cooperation with universities and polytechnics in 2007-2009. Since 2011, universities have recorded the bibliographic data of each publication as part of their data collection efforts. The definitions used in publication data collection mainly apply to data collection by the Ministry of Education and Culture, while individual higher education institutions may have different needs and use other definitions regarding the collection of publication data. The Ministry of Education and Culture uses the data collected by it for the purposes of steering higher education institutions and preparing its science policy.

The aim of collecting publication data is to produce information on the research activities and societal impact of higher education institutions. Publications that are included in the data collection should thus A) stem from research activities and work as experts of the authors and B) the authors, the research activities and the expert work must have an affiliation with the relevant higher education institute.

A precondition for an affiliation with a higher education institution is that the author has been in an employment relationship with the institution while conducting the research and writing the publication, or the institution has been a key facilitator of the publication by offering facilities or guidance (including postgraduate students or scientists who are beneficiaries of a grant). In practice, affiliation with a higher education institution can in most cases be established on the basis of affiliations mentioned in the publication (in other words, the author provides the name of the institution in the publication). In some cases, however, the author does not have the aforementioned links with the higher education institution, even if the affiliation data are cited in the publication. In addition, in some cases the author may have links with a higher education institution even if the affiliation data are not cited in the publication. The higher education institution is responsible for identifying the correct affiliations among those cited in publications. If the publication does not include the authors' affiliation data, the author must state in writing that he or she has an employment relationship with or is a post-graduate student at the higher education institution, or affiliation with the higher education institution must be verified with the HR manager or based on an employment register. Publications will be registered for the higher education institution in which the research associated with the publication was mainly carried out, even if the researcher had moved on to another organisation before the publication came out.

The definition of essentially facilitating the writing of a publication other than through an employment relationship varies in different fields of science, but in general, merely making an office available for a researcher does not meet the criteria for essentially facilitating him or her. In case of post-graduate students at universities, the publications of those post-graduate students will be registered who A) actively attend teaching aiming for a post-graduate degree and B) have been receiving a regular grant for at least 6 consecutive months. As a result of the new status of universities, a docentship will become an honorary title and thus is not adequate proof of affiliation with a university on its own.

Joint publications should be registered under the names of each author, but to ensure that the publication data will be comparable, joint publications should only be recorded once for each higher education institution in the data collection of the Ministry of Education and Culture. (For example, if higher education institution x has 3 authors in a publication and higher education institution y has 1 in the same publication, the publication will only be recorded once for each institution in the data collection.)

A publication must always have an outside publisher; in other words, author's editions are not included in the statistics.

The publication data are submitted using the Kota system similarly to other data collection results. As regards universities, the Ministry of Education and Culture will determine the publication forum classification for the data based on bibliographic data in the publications. The data on the publication forum classification entered in field 1.1.1.31 will be used as a basis for this. If there are clear gaps in the data to be collected that make it impossible to specify the publication forum levels of the publications, the Ministry reserves the right to have the higher education institutions verify the data. This applies to data on conference proceedings in particular.

After the data have been uploaded, the numbers of various publications can be accessed through the Vipunen portal and on the Juuli portal by individual publication. In addition, the Ministry will inform the higher

education institutions of issues having emerged in the course of the verification process as agreed upon later

In the following, certain terms used in the publication data collection instructions and the publication type classification (section 2.5) are introduced. The terms and their definitions are consistent with those used in the publication forum project.

Publication

Publications can be roughly classified into six groups based on their intended use:

- 1) publications intended to advance science and to generate new information (publication types A-C),
- 2) publications intended to disseminate research-based information for the use of a professional community (publication type D),
- performances or similar public results (events) that are an outcome of artistic activity (publication type F),
- 4) publications that disseminate scientific and professional information in society at large (publication type E),
- 5) other publications pertaining to research conducted in higher education institutions that differ in their format from the groups listed above (publication types H-I),
- 6) Theses (publication type G).

Publications should be classified into these groups based on their publication channels and publication channel target audiences. In case of scientific and professional publications in particular, the target audiences may be the same, and individual articles published in both groups may be very similar. For clarity, a few examples of publications targeting a professional community are listed in connection with the definition for a professional publication. Professional journals that publish peer reviewed scientific articles are an exception to this rule. If such journals are classified at levels 1-3 in the publication forum, peer-reviewed scientific articles published in them should be entered as publication types A1 or A2, regardless of the fact that these journals primarily target a professional community (e.g. Duodecim, Suomen lääkärilehti, Liikunta ja tiede). In other cases, articles in these journals will be entered under publication type D1 (article in a trade journal).

The publication forum classifies key scientific publication channels of all fields of sciences into levels 1-3 (for more information on the classification system, visit: http://www.tsv.fi/julkaisufoorumi/). The definition of a scientific publication channel used in the publication forum is consistent with the Ministry of Education and Culture's data collection practices. In addition to the scientific standard of the publication channel, the publication forum also assesses the local nature and significance from the perspective of Finnish research of the publication channel, and levels 1-3 thus do not cover all scientific publication channels that meet the definition.

Consequently, journals, series and publishers assigned to levels 1-3 in the publication forum are publication channels targeting scientific communities as discussed above (see also the aforementioned exceptions), but the publication channel may be scientific even if it has not been assigned to levels 1-3 in the publication forum project. A list of scientific publication channels classified at levels 1-3 in the publication forum project can be accessed and downloaded at http://www.tsv.fi/julkaisufoorumi/haku.php.

If a publication by a scientist/higher education institution has been/is about to be published through a scientific publication channel that is not classified by the publication forum, a proposal to have this channel assessed can be submitted using the proposals page of the publication forum at: http://www.tsv.fi/julkaisufoorumi/ehdota.php.

Please see below for a more detailed definition of a scientific publication, a professional publication, an artistic publication and a popularised publication (levels 1-4 referred to above).

1. Definition of a scientific publication

The publication type classification adopts the term *scientific publication*, which refers to publications in the afore-mentioned group 1. The common feature of *scientific publications* is that they fulfil the following four conditions.

- 1. The publication must generate new information. In this definition, the established practices of each scientific field are applied regarding new information produced by the publication in relation to existing publications.
- 2. The publication must be presented in a form that allows the research results to be verified and/or used in a new study. The importance of verifying the research results depends on the field. Fields that do not consider this to be very important are more interested in the publication allowing research results to be evaluated and used by other researchers.
- 3. The publication and at least its bibliographic data must be presented in a language and published through a channel that makes it available to all interested researchers. The publication language is evaluated in relation to the research field. Some fields may make the publication available to all interested researchers in Finnish or Swedish. The publication channel must be evaluated in the light of both the date of publication and the future (especially regarding electronic publications).
- 4. The publication channel must have an evaluation practice in place, whereby the text intended for publication is evaluated by at least one external party familiar with the field. The publication channel must comply with evaluation practices in relation to the examined text. In some instances, the publication's editorial board may also be considered as evaluators.

A scientific publication channel refers to channels that specialise in publishing scientific results; in other words, ones that have an editorial board comprising experts in the relevant field of science, and a precondition for publishing an article is a quality assessment carried out following the best practices of the field, and above all, a peer review. Publications that have not been subjected to peer review may also be published on scientific publication channels, and these will be recorded in categories B1-B3.

2. Definition of a professional publication

Disseminating information based on research and development in the social environment is part of the statutory duties of higher education institutions. Professional publications refer to publications that disseminate information based on research and development for the use of the professional community. The readership of professional publications mainly includes persons trained in the field who apply the information to their practical work. There are no established definitions for a professional publication. What professional publications have in common is the fact that they fulfil the following three conditions:

- 1. The publication produces new information for the use of a professional community. The information produced by the publication has not been previously published in this format.
- 2. The publication is publically available.
- 3. The publication channel has an editorial board/a publisher, who makes decisions on publications published on the channel.

Professional publication channels include the following professional journals:

Metsäalan ammattilehti, Sosiaalitieto, Kehittyvä elintarvike, Acatiimi, Journalisti, Arkkitehti, Sairaanhoitaja, Puutarha & kauppa, Ulkopolitiikka and Opettaja.

3. Definition of an artistic publication

Artistic activities comprise part of the statutory duties of higher education institutions. In this context, an artistic publication also refers to performances or similar public results (events) that are the outcome of artistic activity.

Established practices do not exist for defining artistic publications. If the following three reference conditions are met, the higher education institution can record an artistic publication as an outcome of its activities.

- The outcome of artistic and design activities is the result of purposeful activities by the author or authors based on the authors' artistic vision, and at least one of the authors is affiliated with the higher education institution.
- 2. Publicity is one of the criteria for entering the outcomes. In the field of arts, publicity mainly means that the publication or public presentation of the work has been the decision of a party other than the author him/herself, such as the commissioner, curator, producer or publisher. The public presentation of the

work must be verifiable afterwards. In order to meet the criteria of publicity, the artistic publication must thus mainly be:

- A) made publically available for at least a limited time period by someone else than the author(s), or
- B) subjected to an independent peer review and made publically available, for at least a limited time period, or
- C) commissioned, received and used for artistic purposes by an organisation outside the higher education institution.
- 3. An artistic publication should be entered as an outcome for the higher education institution only once, regardless of whether one or several actors in the institution were involved in the creation of the publication. If the published work consists of several partial artistic performances that require independent artistic inputs, however, the partial performances will be recorded separately as outcomes of artistic activity. The consecutive launches of the same publication should not be recorded as separate results. A later version of a publication will, however, be regarded as an outcome to be recorded separately, provided that its realisation required essentially new and significant artistic editing and other separate resource allocation, or if the re-launch is essentially based on exceeding a higher publicity threshold than before.

The entry should be made based on the first, or otherwise the most significant, public presentation, or as an entity that is formed by consecutive launches of the same publication (i.e. in form of a production, tour or project). When entering an artistic publication, careful attention should be paid on the condition that specifies the number of times a publication can be entered.

Outcomes produced as a consequence of artistic instruction and guidance should not be reported, except to the extent that they concern the teacher's personal artistic input meeting the aforementioned three criteria.

When defining the manifestation types of the publication, the publication types of artistic activity specified by the Working group on artistic activity may be applied, see https://confluence.csc.fi/pages/viewpage.action?pageld=21072701

4. Definition of a popularised publication

A popularised publication is a publication that communicates information based on research and development efforts to the general public, where particular familiarity with the field in question is not required to understand the contents. Examples of popularised publications are non-technical books and contributions to public debate in newspapers, in journals intended for the general public and through online platforms.

In some cases, the difference between a popularised and a professional publication channel is not firmly established. Basically, popularised and professional publications can be distinguished by the target audience of the publication channel or, alternatively, the membership of the organisation that publishes the channel/journal. If the target audience of the publication channel or the membership of the organisation publishing it is not limited to a certain professional group, publications using that channel are primarily categorised as popularised.

Peer review

Peer review refers to the evaluation of manuscripts sent for publication by external experts selected by the editorial board of the publication series. In some instances, the editorial board of the publication may also be considered comparable to peer reviewers. The peer review evaluates issues such as the coverage of the material and the author's command of the theoretical frame of reference, the reliability and accuracy at which the research has been carried out, and the originality and novelty value of the outcomes compared to earlier research. For a description of the peer review process, see the peer review instructions of the Finnish Association for Scholarly Publishing: http://www.tiedekustantajat.fi/stl-files/STL-referee09.pdf.

For the publication type classification used in data collection by the Ministry of Education and Culture, the peer review must meet the following requirements at minimum:

- the evaluation covers the entire manuscript (rather than just an abstract or extract)
- the peer review is conducted prior to publication
- the peer review is conducted by a distinguished expert independent of the author of the publication.

Conference proceedings

Conference proceedings refers to a collection of articles which has been approved for presentation at a regularly occurring conference and for publication and which appears in the conference's own publication series or is published by an external scientific publisher or conference organiser (see Table below). This is a typical form of publication in information processing science and technological fields. Conference proceedings may be published by:

- 1. a scientific association or organisation behind the conference, in which case the publication will either appear:
 - a. in the organisation's own series that has an ISSN number, for example IEEE/ACM International conference on software engineering, ISSN 0270-5257, or
 - with the support of the organisation, but not as part of a publication series, in which case the
 publication will have an ISBN number but not an ISSN number, for example "2010 7th
 International Conference on the European Energy Market (EEM 2010)", ISBN 978-142-446838-6.
- 2. a local host organisation arranging the conference, such as a university. In that case, the publication usually only has an ISBN number, for example "Proceedings of the 9th Nordic Symposium on Building Physics", ISBN 978-952-15-2575-9.
- 3. a third party, for example Springer's Lecture Notes in Computer Science series. The most important publications of various conferences may also be selected for the publication series of third-party publishers. In that case, the publication usually has the ISSN of a monograph or a serial publication.

Conference proceedings are not a typical publication form in social sciences, humanities, natural sciences or medicine. Articles in a book composed of papers delivered at a one-off event should be entered as articles in a research book. Articles in scientific journals are always entered as journal articles, even if they were based on a paper delivered at a conference. In the aforementioned cases, the publication forum level is also determined by the practices of the publication type in question. The publication forum level of conference proceedings is always defined by the established name of a conference classified in the publication forum.

The publicity of conference proceedings is defined similarly to other publications; in other words, the publication must be publically available. A publication that only exists as part of an individual library's material (e.g. a publication archive) or is public on the scientist's homepage is not publicly available. And, for example, a publication that is distributed to conference participants or subject to restricted access online only is not publically available. If publications distributed on CD ROMs or USB flash drives have an ISBN code, they are public.

Conference proceedings contain publications of varying scope. Data collection by the Ministry of Education and Culture only takes into consideration full written versions of conference papers (full paper). A full paper is defined as customary in the field in question, and the number of pages is not the only decisive factor. Abstracts, extended abstracts, posters or PowerPoint presentations of conference papers will not be considered. Category A4 only includes articles where the peer review is based on an entire manuscript, not only on an abstract.

The most important bibliographic data of conference proceedings are as follows (for mandatory data in the data collection, see Table on page 9). The established name of a regular conference typically appears in the name of the parent publication.

Organisation behind the publication	Data used to determine the publication forum	Example	Journal/ series name	ISSN	ISBN	Parent publication name	Publisher
The scientific organisation or association behind the conference – published in the conference's proceedings series that has its own ISSN code	Established conference name / Parent publication name / ISSN / JufoID	2011 IEEE 73rd Vehicular Technology Conference (VTC Spring)	IEEE VTS Vehicular Technology Conference	1550- 2252	978-1- 4673- 6337-2	2013 IEEE 77th Vehicular Technology Conference (VTC Spring)	Institute of Electrical and Electronics Engineers
The scientific organisation or association behind the conference – publication supported by the organisation but not part of a series	Established conference name / Parent publication name / ISSN / JufoID	2012 9th International Conference on the European Energy Market (EEM)			978-1- 4673- 0832-8	9th International Conference on the European Energy Market (EEM 2012) Florence 10-12 May 2012	Institute of Electrical and Electronics Engineers
Local host organisation in charge of conference organisation that may change annually	Established conference name / Parent publication name / ISSN / JufoID	2011 9th Nordic Symposium on Building Physics (NSB)			978- 952-15- 2575-9	Proceedings of the 9th Nordic Symposium on Building Physics NSB 2011, Tampere, Finland, 29 May - 2 June 2011	Tampere University of Technology
An external party that may change annually	Established conference name / Parent publication name / ISSN / JufoID	2013 44th International colloquium on automata, languages and programming (ICALP)	Lecture Notes in Computer Science	0302- 9743	978-3- 642- 39206- 1	Automata, Languages, and Programming 40th International Colloquium, ICALP 2013, Riga, Latvia, July 8-12, 2013	Springer

Electronic publication

Electronic publications do require ISSN codes and ISBN numbers, if the printed publication also requires them. Each publication should only be entered once, even if it has come out in several versions (e.g. online and printed).

Online media include a great deal of non-traditional types of publications, such as blogs, Wikipedia articles and other websites. These formats also publish a large number of important scientific publications. However, it is not possible to separate scientifically or socially important publications from these new publication types, and they are thus excluded in the data collection.

Translations and reprints

As a rule, translations of the author's own articles or those written by others are usually ignored in the publication data collection. The only exception is a translation for which the editor/translator has written an extensive introduction or foreword, in which case the foreword should be entered in category C2. Neither are new editions of publications considered, unless the publication has been modified to a significant degree compared to the previous edition.

Publication year

The publication year refers to the year in which the publication was published for the first time as a version with full bibliographic data. The publication year of articles in scientific journals can be specified in two different ways; see the following section. The publication year is generally displayed in the publication. If this is not the case, the publication year must be verifiable from the publisher. The publication year means the year of publication indicated in the publication, which may be different from the year in which the publication was available physically or in online format.

A publication may appear A) only as an electronic version (online only), B) as an online and printed version and C) as a printed version only. Scientific journals frequently publish approved and peer reviewed articles as an online version before the actual journal containing the article is published (online first, publish ahead of print, etc.). These versions often have different publication years. Various higher education institutions have different practices regarding when and how their publications are entered in the institution's publication register. In the Ministry of Education and Culture's data collection, the publication year is defined following the higher education institution's local practice. The publication year may thus be either the year of the so-called online first version, or the publication year of the printed version. In case of so-called online first articles, full bibliographic data refer to the DOI code and ISSN number. N.B. The higher education institutions have the duty to ensure that a publication is only reported once; in other words, that the printed version of an online article already reported is not entered a second time.

Only publications whose bibliographic data are available by 31 January 2015 should be included in the publication data collection. The aim of this deadline is that joint publications of universities are reported in the data collection of the same year. Publications whose bibliographic data is only available after this date will be reported in the data collection of the following year, entering the year that is in line with the higher education institution's usual practice as the publication year. In other words, the reporting year can be different from the year of publication. The reporting year of publications is mainly used in statistics on publication data.

Publication types and information content to be collected

The Ministry of Education and Culture annually collects information on the publication activities of higher education institutions by publication types defined in the Publication Type Classification Manual. For Class G (theses), only data on doctoral dissertations are collected (publication types G4-G5) on form 3A. NB! For doctoral dissertations, the definition of affiliation differs from the the one given at the beginning of this document. A university should submit the data on all doctoral dissertations approved at the university in question as part of data collection for that year, regardless of the author's affiliation.

The mandatory information required when uploading the publication data is listed below.

Field	Publication types A-E	Publication types F-I
1.1.1.1 Publication type	X	X
1.1.1.2 Publication field of science	Х	Х
1.1.1.3 Publication field of education	Х	Х
1.1.1.4 Authors in the organisation	Х	
1.1.1.5 Organisation sub-unit		
1.1.1.6 Publication authors	Х	
1.1.1.7 Number of authors in publication	Х	
1.1.1.8 International co-publication	Х	
1.1.1.9 National co-publication	Х	
1.1.1.10 Publication name	X	
1.1.1.11 Publication year	Х	
1.1.1.12 Volume		
1.1.1.13 Issue		
1.1.1.14 Pages		
1.1.1.15 Article number		
1.1.1.16 Publication language		
1.1.1.17 Journal/series name	*	
1.1.1.18 ISSN	*	
1.1.1.19 ISBN	*	
1.1.1.20 Parent publication name		
1.1.1.21 Parent publication editors		
1.1.1.22 Publisher	*	
1.1.1.23 Place of publishing		
1.1.1.24 Country of publishing		
1.1.1.25 Internationality of publication	X	Х
1.1.1.26 DOI code		
1.1.1.27 Permanent website address		
1.1.1.28 Open access	X	
1.1.1.29 Source database code		
1.1.1.30 EVO publication		
1.1.1.31 Publication channel of publication (JUFO-ID)		
1.1.1.32 Higher education institution specific ID of		
publication		
1.1.1.33 Established name of the conference	*	
	* Mandatory for certain publication types, see	
	below	7, 22, 300

The items marked with an asterisk are mandatory for certain publication types as shown in the Table below. One of the identifiers in the Table must be given for each publication type. The list of mandatory data for each publication type sets down the minimum data by which the publication can be identified for the publication forum. Publication forum level identification is naturally more reliable, if all the optional data are available.

Articles in scientific journals	Monographs and article	Articles in conference proceedings**	
A1, A2 and B1	A3, B2, C1 and C2	A3, B2, C1 and C2	
	Finnish publisher*	Foreign publisher	
1. ISSN	1. ISSN	1. Publisher***	Established name of the conference
Journal/series name	Journal/series name	2. ISBN	
	 Publisher*** ISBN 		

^{*} The journal/series name and the ISSN code are used to identify the publication forum level if a research book/monograph has been published in a book series by a Finnish publisher. Finnish publishers have book series that belong to different level classes, and the level is determined by the publication series level classification.

1.1.1 Data to be collected

For publication types A-E and G4 and G5, data on the publication type, field of education and field of science as well as publication metadata are collected. For publication types F, H and I, quantitative data by each field of science and field of education is collected, as well as an indication of whether or not the publication is international.

The data will be collected using two different data collection forms, one for publication types A-E and G4–G5, and another for publication types F-I. For publication types A-E and G4–G5, the data of a single publication should be entered on a single line, whereas for publication types F-I, the data should be summed up by type of publication, field of science, field of education and whether or not the publications are international.

1.1.1.1 Publication type

Description

For more detailed information on publication types, see section 2.5. The publication type should be reported in full, not only the main category.

N.B. The publication type definitions have been revised since last year.

Data format

Value indicated in the publication type classification, e.g. "A1" (Journal article, original research in a scientific journal).

1.1.1.2 Publication field of science

Description

Statistics Finland's field of science classification 2010. Several fields of science can be entered for a publication (a maximum of 6). The fields of science should be given in the order of their relevance to the publication. For publication types A-E and G4-G5, at least one field of science should be given, and for publication types F, H and I, some field of science, or a non-specific field of science should be entered.

The field of science refers to the field of science of the content, in other words the angle of the scientist/s to the publication. Information on the field of science is essential for using the publication data for preparing science policy.

Data format

^{**} For data to be entered for conference proceedings, see pages 6-7 of the manual.

^{***}For research books, this refers to the parent publication's publisher.

The data collection form has six fields:

- 1. I Field of science (Primary field of science)
- 2. Il Field of science
- 3. III Field of science
- 4. IV Field of science
- 5. V Field of science
- 6. VI Field of science

The 3 or 4-digit value following Statistics Finland's field of science classification 2010 (e.g. 212), with the non-specific field of science code (NNN). The non-specific field of science code can be used for publication types F, H and I. For the field of science classification, see section 2.4.

N.B. For technical reasons, the field of science 2010 classification on the Statistics Finland website also shows the 3-digit higher-level codes of the 4-digit codes (e.g. 118 Biological sciences). If the 3-digit code has been divided into 4-digit subgroups, the 3-digit code is not available for entering the field of science.

If less than 6 fields of science are entered for the publication, fields 2-6 should be left vacant as required. Field 1 should always be populated with a value, which for publication types A-E and G4-G5 is a field of science, and for publication types F, H and I a field of science or a non-specific field of science.

1.1.1.3 Field of education of the publication

Description

The publication's field of education within the university's educational responsibilities. The field of education should be reported following the Study Administration's subfield of education classification from 1995. The fields of education should be given in the order of relevance of each field to the publication. The Study Administration's subfields of education 1995 are generally referred to as fields of education, for example in the government decree on the specification of educational responsibilities.

As regards publications by language centre of library staff, these are reported under the university's field of education that is the most relevant to their content.

Several fields of education can be reported for a publication (maximum of 6). For publication types A-E, at least one field of education should be given, and for publication types F, H and I, some field of education, or a non-specific field of education should be entered.

Data format

The data collection form has six fields:

- 1. I Field of education
- 2. II Field of education
- 3. III Field of education
- 4. IV Field of education
- 5. V Field of education
- 6. VI Field of education

A 2-digit code in compliance with the Study Administration's field of study classification 1995 (e.g. 90), followed by the non-specific field of education code (NN). The non-specific field of education code can be used for publication types F, H and I. For the field of education classification, see section 2.2.

If less than 6 fields of education are entered for the publication, fields 2-6 are left vacant as necessary. Field 1 should always be populated with a value, which for publication types A-E and G4-G5 is a field of education, and for publication types F, H and I a field of education or a non-specific field of education.

1.1.1.4 Authors in the organisation

Description

Researchers affiliated with the higher education institution having taken part in producing the publication. For a definition of the author's affiliation with the higher education institution, see introduction to section 2.3.

In case of doctoral dissertations (publication types G4 and G5), this field should be left vacant.

Data format

The format of author data should be consistent in each higher education institution, and a semicolon should be used as a separator for names. The first name is primarily written out in full.

The author data are primarily reported in the format "von Hummel, Essi; Möttönen, Matti".

1.1.1.5 Organisation sub-unit (code)

Description

Higher education institution's faculty, department or unit whose staff member has taken part in producing the publication. A maximum of 20 organisation sub-units per publication can be reported for a higher education institution.

As an exception to data collection for 2014, the sub-unit code should be entered in this field. Universities are requested to submit to the Ministry a separate list of the sub-unit names used.

We recommend that you use the same cost centres / areas of responsibility as in the R&D data collections of Statistics Finland and the Ministry of Education and Culture's staff data collection (field 3.1.1.5).

Data format

Code value used in the higher education institution's set of codes. The form has fields for 20 sub-units; fields that are not needed should be left vacant.

1.1.1.6 Publication authors

Description

Full data on the publication's authors (including foreign authors) in the **form and order** in which they are listed in the original publication or source database. To ensure recognition, particular attention should be paid to the correct spelling of the first author's name. If the number of authors exceeds 20, the total number of authors should be reported in a separate field (1.1.1.7). However, the names of the first 20 authors should be included in the Publication authors field.

Data format

The names should be given in the format in which they were listed in the original publication or source database. A semicolon should be used as a separator for the names.

1.1.1.7 Number of authors in publication

Description

The total number of authors in the publication. If the number of authors exceeds 50, it is sufficient to enter "50". If the authors of the publication comprise groups, the group members will be included as authors following the common practice in the field of science in guestion, or as agreed between the research groups.

Data format

Datum as an integer.

1.1.1.8 International co-publication

Description

An international co-publication means that the authors include at least one person employed by a non-Finnish organisation. If a person has an employment relationship with both a Finnish and an international organisation, and he or she has entered both as his or her affiliation, the publication will be considered an international co-publication. An article in a publication whose editor comes from another organisation does not as such mean that this is a co-publication with the other organisation.

The following codes can be used:

Data format

One-digit value from the following set of codes, for example 1:

Code Explanation

- 0 not an international co-publication
- 1 international co-publication

1.1.1.9 National co-publication

Description

A national co-publication means that the publication has been co-authored with a national research organisation (other than a higher education institution), divided into categories A) university hospital district, B) state sector research institute or C) other Finnish research organisation (including companies). For each publication, it must be indicated separately whether it was co-authored with an organisation belonging to one of these categories (i.e. organisation categories 1-3 separately).

Co-authoring a publication means that at least one of the authors is a person employed by one of the aforementioned research organisation types. If a person has an employment relationship with both a higher education institution and another national research organisation, and he or she has entered both as his or her affiliation, the publication will be considered a national co-publication. An article in a publication whose editor comes from another organisation does not make it a co-publication with the other organisation.

Data of publications co-authored with Finnish higher education institutions will be obtained by amalgamating the publication data collected by the Ministry.

Data format

The form comprises three fields: A) university hospital district, B) state sector research institute and C) other Finnish research organisation. Each field contains the following codes:

- 0 is not a co-publication with the organisation type in question
- 1 is a co-publication with the organisation type in question

1.1.1.10 Publication name

Description

Publication name as given in the article or the book. If the article name is different in the parent publication's list of contents and in the actual article, the version in the article should be used. The main heading and possible subheading should be entered in the same field, separated by a combination of a space, colon and space. If necessary, the name of a foreign-language publication may be entered as a transliterated version.

Data format

Freely worded text field. The main heading and possible subheading should be entered in the same field, separated by a combination of a space, colon and space. If the data in the field contain semicolons, quotation marks should be added to the beginning and end of the field.

If necessary, the name of a foreign-language publication may be entered as a transliterated version. If the name of the publication contains special characters, however (non-Latin characters, mathematical formulae etc.), it should be made sure that the special characters are shown correctly in the data collection file. Processing a file in Excel, for example, may mess up the characters in the file.

1.1.1.11 Publication year

Description

The publication year refers to the year in which the publication was published for the first time as a version with full bibliographic data. The publication year of articles in scientific journals can be specified in two different ways; see instructions on page 6.

Data format

A four-digit year, e.g. 1976.

1.1.1.12 Volume

Description

Volume of the journal in which the article appeared.

Data format

Freely worded text field.

1.1.1.13 Issue

Description

Issue of the journal in which the article appeared.

Data format

Freely worded text field.

1.1.1.14 Pages

Description

Page numbers of the publication (e.g. 1-20) on which the article appeared.

Data format

As given in the bibliographic data, e.g. 1-20.

1.1.1.15 Article number

Description

Some scientific journals use an article number. This should be entered as given in the publication.

Data format

Freely worded text field.

1.1.1.16 Publication language

Description

Language in which the publication was written.

Data format

Two-digit or two-character value following the Names of languages 2003 classification of Statistics Finland, e.g. fi.

http://www.stat.fi/meta/luokitukset/kieli/001-2003/index.html

1.1.1.17 Journal/series name

Description

Journal/series name as fully as possible (written out in the long form, no abbreviations, e.g. British Medical Journal, not BMJ).

For conference articles, if the name of the journal/series is not known, the established name of the conference without an ordinance number or year and acronym can be given (e.g. International Conference on Machine Learning, not The 27th International Conference on Machine Learning (ICML 2010)). The journal/series name should not have extra words or characters, for example the name of a theme issue or a proceedings name.

Especially if the journal/series or conference does not have an ISSN code, or if the ISSN code is not known, the name should be copied directly from the publication forum list of journals/series, if the publication channel is classified in it: http://www.tsv.fi/julkaisufoorumi/haku.php.

For monographs and articles in research books, the series name is entered if known. Especially in case of Finnish monographs/articles in research books, attention should be paid to this field.

Data format

Freely worded text field.

1.1.1.18 ISSN

Description

ISSN number of the series in which the journal, monograph or parent publication was published. The ISSN number of a journal is primarily reported as given in the printed version. If the journal does not have a printed version or if the article only came out as an online version, the ISSN number of the online version can be used. One ISSN number only should be reported, even if the journal or the series had several.

The ISSN code check character will be verified as the data are downloaded.

Data format

Two times four digits with a hyphen and without any extra characters, for example 0090-8258.

1.1.1.19 ISBN

Description

Publication or parent publication ISBN number.

The ISBN code check character will be verified as the data are downloaded.

Data format

Text field similar in format to the official ISBN code without the string ISBN at the beginning, e.g. 978-951-42-9761-8.

http://www.kansalliskirjasto.fi/julkaisuala/isbn.html#ISBN-tunnuksen rakenne

1.1.1.20 Parent publication name

Description

Name of the parent publication (e.g. collection of articles).

For conference proceedings, the parent publication name should be entered in the format that it is given in the publication.

Data format

Freely worded text field.

1.1.1.21 Parent publication editors

Description

Names of the editors of the parent publication.

Data format

Editors of the parent publication are given in the format and order in which they were listed in the original publication or source database. A semicolon should be used as a separator for the names.

1.1.1.22 Publisher

Description

Publication's publisher.

Especially if the publication does not have an ISSN code, or if the ISSN code is not known, the publisher's name should be copied directly from the publication forum list of journals/series if the publication channel is classified on it: http://www.tsv.fi/julkaisufoorumi/haku.php.

Data format

Freely worded text field.

1.1.1.23 Place of publishing

Description

The place or places given in connection with the publication's publisher.

Data format

Freely worded text field.

1.1.1.24 Country of publishing

Description

Country of publishing of a journal, monograph or parent publication.

Data format

A three-digit value following Statistics Finland's Countries 2007 classification, for example 246.

http://www.stat.fi/meta/luokitukset/valtio/001-2007-09-21/index.html.

1.1.1.25 Internationality of publication

Description

A domestic publication (0) refers to a publication whose publisher is Finnish or which has primarily been published in Finland. An international publication (1) refers to a publication whose publisher is not Finnish or which has primarily been published outside Finland. In case of conference proceedings, the publisher means the publisher of the conference proceedings.

Data format

One-digit value from the following set of codes:

Code Explanation

- 0 Domestic publication
- 1 International publication

1.1.1.26 DOI code

Description

Publication DOI code.

Data format

Freely worded text field, for example 10.1038/ng1104-1133.

1.1.1.27 Permanent website address

Description

Website address based on permanent identifiers (e.g. DOI, URN or handle) that takes the user directly to the full text version of the publication (in other words, not to the journal/publisher frontpage for example). Reference may be made both to the freely available version and to a version with limited access rights residing on a publisher's server.

Data format

Web address, for example http://dx.doi.org/10.1038/ng1104-1133.

1.1.1.28 Open access

Description

For open access to the publication, the following codes should be used:

- 0 not an Open access publication
- 1 Open access publication
 - the publication has appeared in a journal or a series where all articles or partial publications can be permanently downloaded and read on the Internet without payment.
- 2 Open access publication, parallel saved
 - an Open access copy of a publication having appeared in a journal subject to a subscription fee or other work that is subject to a fee to the readers, which has been parallel saved in a digital archive service that, for example, belongs to the organisation or is specific to the relevant field of science. The publication may be either a so-called publisher's version or the researcher's own latest (peer reviewed) version, and it may be accessible immediately or after a reasonable time of embargo (e.g. six months) set by the publisher. The publication may also be a pre-print version released to the science community before its official release, if it is permanently accessible in the archive service of the organisation or the field of science. Also individual publications that offer open access should be taken into account, even if there is no open access to the actual series.
- 9 not know if the publication is an Open access one.

Data format

One-digit value from the following set of codes, for example "1" (Open access publication):

Code Explanation

- 0 not an Open access publication
- 1 Open access publication
- 2 Open access publication, parallel saved
- 9 Not known

1.1.1.29 Source database code

Description

Publication identifier or ID code in the database from which its record was mined. If there are several codes, these should be separated using a semicolon (for example WOS: 000275364300009; PMID:20036235).

Source databases include ISI Web of Science, Scopus, Pubmed, ArXiv, Cab Abstracts, Arto, Fennica.

Data format

The format to be used is source database name/abbreviation: actual identifier (for example WOS: 000275364300009). If there are several codes, these should be separated using a semicolon (for example WOS: 000275364300009; PMID:20036235).

1.1.1.30 EVO publication

Description

Only applicable to publications in the field of health and medicine. Articles included in the so-called EVO application (special central government transfer application) submitted to the Ministry of Social Affairs and Health that have appeared 1) in journals with an impact factor value or 2) in one of the following Finnish journals: Duodecim, Suomen Lääkärilehti, Suomen Hammaslääkärilehti, Hoitotiede, Finska Läkaresällskapets handlingar and Sosiaalilääketieteellinen aikakauslehti.

Data format

One-digit value from the following set of codes:

Code Explanation

vacant not an EVO publication

1 EVO publication

1.1.1.31 Publication channel of publication (JUFO-ID)

Description

The Ministry of Education and Culture will add publication forum classes to the publications of universities. Should they wish, higher education institutions can enter the publication channel datum used in their own systems to facilitate processing.

Data format

4/5-digit value following the publication forum classification (http://www.tsv.fi/julkaisufoorumi/haku.php), for example 5003.

1.1.1.32 Higher education institution specific ID of publication

Description

Used to facilitate the processing of publication data between higher education institutions and the Ministry.

If no values have been entered by the higher education institution, the Ministry will generate the values.

Data format

Freely worded text field

1.1.1.33 Established name of the conference

Description

Previously, the established name of the conference was entered in the same field as the publication series name, but in data collections for 2014 and later, a dedicated field is provided for this entry. Applies to conference publications where this datum is available. The datum is used to determine the publication forum levels of conference proceedings.

Data format

Freely worded text field

2 Classifications

2.1 Statistics Finland's educational institution ID

In forthcoming data collections, Statistics Finland's 5-digit educational institution ID should be used. The educational institution IDs cover all levels of education, and including the IDs will make using the university data in the Ministry of Education and Culture databases easier.

Educational institution IDs of universities:

01903 Åbo Akademi University

01904 University of Oulu

01905 University of Tampere

01906 University of Jyväskylä

01910 Hanken School of Economics

01913 University of Vaasa

01914 Lappeenranta University of Technology

01915 Tampere University of Technology

01918 University of Lapland

10076 Aalto University

10088 University of Eastern Finland

10089 University of Turku

10103 University of Arts

2.2 Field of education classification 1995

The field of education classification 1995 refers to the fields of education used in the Government Decree on University Degrees, whose official name is Study Administration's field of study classification 1995. The statistics on universities and, for example, their degree targets are based on this classification.

Fields of education used by the universities:

- 75 Theology
- 76 The humanities
- 77 Art and design
- 78 Music
- 79 Theatre and dance
- 80 Education
- 81 Sport sciences
- 82 Social sciences
- 83 Psychology
- 84 Health sciences
- 85 Law

- 86 Economics
- 87 Natural sciences
- 88 Agriculture and forestry
- 89 Engineering
- 90 Medicine
- 91 Dentistry
- 92 Veterinary medicine
- 93 Pharmacy
- 94 Fine arts

2.3 Field of education classification 2002

Refers to the Study Administration's field of education classification from 2002. It is a new version of the 1995 classification, and it is mainly used in statistics on other forms of education than those provided by universities. Personnel data are also collected following the field of education classification 2002 to ensure that the data are comparable with, for example, those from the polytechnics sector.

Field of education classification 2002:

- 1 Humanities and education
- 2 Culture
- 3 Social sciences, business and administration
- 4 Natural sciences
- 5 Technology, communication and transport
- 6 Natural resources and the environment
- 7 Social services, health and sports
- 8 Tourism, catering and domestic services

2.4 Fields of science classification

The fields of science classification is used in statistics on research and development activities. The fields of science classification introduced by Statistics Finland in 2007 was refined in 2010 by dividing the classes into smaller and more appropriate entities.

The field of science classification is based on the so-called Field of science and technology classification in the Frascati manual published by the OECD to support the compilation of statistics on R&D activities.

Field of science classification 2010

Natural sciences

- 111 Mathematics
- 112 Statistics and probability
- 113 Computer and information sciences
- 114 Physical sciences

115	Astronomy, Space science
116	Chemical sciences
1171	Geosciences
1172	Environmental sciences
1181	Ecology, evolutionary biology
1182	Biochemistry, cell and molecular biology
1183	Plant biology, microbiology, virology
1184	Genetics, developmental biology, physiology
119	Other natural sciences
Engine	eering and technology
211	Architecture
212	Civil and Construction engineering
213	Electronic, automation and communications engineering, electronics
214	Mechanical engineering
215	Chemical engineering
216	Materials engineering
217	Medical engineering
218	Environmental engineering
219	Environmental biotechnology
220	Industrial biotechnology
221	Nano-technology
222	Other engineering and technologies
Medica	al and health sciences
3111	Biomedicine
3112	Neurosciences
3121	Internal medicine
3122	Cancers
3123	Gynaecology and paediatrics
3124	Neurology and psychiatry
3125	Otorhinolaryngology, ophthalmology
3126	Surgery, anesthesiology, intensive care, radiology
313	Dentistry
3141	Health care science
3142	Public health care science, environmental and occupational health
315	Sport and fitness sciences
316	Nursing
317	Pharmacy

6132 Visual arts and design

Other humanities

History and archaeology

Theology

614

615

616

		13 Novem
318	Medical biotechnology	
319	Forensic science and other medical sciences	
Agricu	lture and forestry	
4111	Agronomy	
4112	Forestry	
412	Animal science, dairy science	
413	Veterinary science	
414	Agricultural biotechnology	
415	Other agricultural sciences	
Social	sciences	
511	Economics	
512	Business and management	
513	Law	
5141	Sociology	
5142	••	
515	Psychology	
516	Educational sciences	
517	Political science	
518	Media and communications	
519	Social and economic geography	
520	Other social sciences	
Humai	nities	
611	Philosophy	
6121	Languages	
6122	Literature studies	
6131	Theatre, dance, music, other performing arts	

2.5 Types of publication

A Peer-reviewed scientific articles

A1 Journal article (refereed), original research

- Fulfils the definition of a scientific publication.
- Mainly includes unpublished material.
- Peer-reviewed article.
- Journal in which the article is published has an ISSN code.

The category includes:

- Articles presenting the results of original research. Also articles presenting original research published in trade journals cited on the publication forum list.

Example I

"A cell spot microarray method for production of high density siRNA transfection microarrays". http://dx.doi.org/10.1186/1471-2164-12-162

Example II

"Terveysliikunnan lukutaidon yhteys vapaa-ajan liikunta-aktiivisuuteen ja fyysiseen kuntoon työikäisillä miehillä"

http://lts.fi/julkaisut/liikunta-ja-tiede/liikunta-ja-tiedelehti-12011/terveysliikunnan-lukutaidon-yhteys-vapaa

The category does not include:

- Review articles (Category A2)
- Chapters in research books (Category A3)
- Articles in conference proceedings (Category A4)
- Brief case reports or brief review articles (Category B1)
- Editorials, book reviews, discussion papers, letters, comments (Category B1). If one of these article types has been peer reviewed, it may be included in category A1
- Articles not based on original research intended for application by the professional community (Category D1)

For example: "Käsite "monityydyttymättömät rasvahapot" on johtanut harhaan", http://kehittyvaelintarvike.fi/teemajutut/kasite-monityydyttymattomat-rasvahapot-on-johtanut-harhaan -> An article in a trade journal (D1)

N.B.!

Articles that meet the aforementioned criteria published in special issues of journals should be entered in either category A1 or A3. Conference proceedings published in a special issue of a journal should be entered in either category A1 or A4.

A2 Review article, Literature review, Systematic review

- Fulfils the definition of a scientific publication with the exception of the requirement to generate new information
- Based on previous refereed journal articles on the same theme. Review articles are particularly common in medicine and health sciences.
- Based on the most important refereed journal articles.
- Article has been peer-reviewed.
- Journal in which the article is published has an ISSN code.

The category includes:

- Reviews of a specific field of science based on original publications or other results presented in research.

For example: Metabolism of Ophthalmic Timolol: New Aspects of an Old Drug

http://onlinelibrary.wiley.com/doi/10.1111/j.1742-7843.2011.00694.x/abstract;jsessionid=CCE0E5284476BBA62BBE8CAA368E114A.d04t03

The category does not include:

- Refereed journal articles (Category A1)
- Chapters in research books (Category A3)
- Conference proceedings (Category A4)
- Brief research reports (case report) or brief review articles (Category B1)
- Editorials, book reviews, discussion papers, letters, comments (Category B1)
- Articles not based on original research intended for application by the professional community (Category D1)

A3 Book section, Chapters in research books

- Fulfils the definition of a scientific publication.
- Mainly includes unpublished material.
- Peer-reviewed by editorial board or equivalent.
- As a rule, the book has an ISBN number.

The category includes:

- Articles published in scientific research books
- Articles published in scientific yearbooks or similar

The category does not include:

- Non-refereed book sections or chapters in research books (Category B2)
- Articles in professional books, including short articles in encyclopaedias (Category D2)

A4 Conference proceedings

- Fulfils the definition of a scientific publication.
- -Published in the printed publication, or one that is otherwise publicly accessible, of a regularly occurring scientific conference. Conference proceedings printed or otherwise made publically available. E.g. publications distributed to conference participants or with restricted online access only are not publically available. If publications distributed on CD ROMs or USB flash drives have an ISBN code, they are public.
- A full written version of a conference paper (full paper), not just an abstract.
- The entire article has been peer reviewed, not only the abstract.

The category includes:

- Articles based on invited scientific seminar presentations or posters

For example: Nuclear PDFs at NLO - status report and review of the EPS09 results http://www.sciencedirect.com/science/article/pii/S0375947411001199

The category does not include:

- Articles other than refereed journal articles in conference proceedings
- Abstracts of conference presentations, extended abstracts, posters or PowerPoint presentations
- Brief research reports (case report) or brief review articles (Category B1)
- Non-refereed conference proceedings (B3)
- Articles not based on original research intended for application by the professional community (Category D1)
- Articles in professional conference proceedings (Category D3)
- Articles in a research book from an individual conference, seminar or event (one that is not regularly repeated) (Category A3).

For example: Li TW, Jones PA. Methylation changes in early embryonic genes in cancer [abstract]. http://www.aacrmeetingabstracts.org/cgi/content/abstract/2006/1/7-c

-> Abstract, not a full paper

B Non-refereed scientific articles

B1 Non-refereed journal articles

- The category includes non-refereed journal articles. It also includes brief research reports (case reports) or review articles, editorials, book reviews, discussion papers, letters and comments in scientific journals
- The journal has an editorial board but is not necessarily required to comply with peer review procedures.
- Journal in which the article is published has an ISSN code.

The category includes:

- Non-refereed articles
- Brief research reports or brief review articles
- Editorials, book reviews, discussion papers, comments, etc. in scientific journals

The category does not include:

- Original articles or other peer reviewed articles comparable to original articles (Category A1)
- Refereed journal articles (Category A1)
- Review articles (Category A2)
- Chapters in research books (Category A3)
- Conference proceedings (Category A4)
- Articles not based on original research intended for application by the professional community (Category D1)

B2 Book section

- Non-refereed book sections, which possibly have an editorial board, but are non-refereed.
- As a rule, the book has an ISBN number.

The category includes:

- Non-refereed book sections
- Book sections closer to a scientific article than a report and funded by research institutes
- Book sections closer to a scientific article than a report and funded by government departments

The category does not include:

- Chapters in research books (Category A3)
- Articles in a professional book (Category D2)
- Published development or research reports or studies (Category D4)
- Textbooks, professional manuals or guides, dictionaries (Category D5)
- Brief forewords or introductions

B3 Non-refereed conference proceedings

- Conference proceedings printed or otherwise made publically available. E.g. publications distributed to conference participants or with restricted online access only are not publically available. If publications distributed on CD ROMs or USB flash drives have an ISBN code, they are public.
- A full written version of a conference paper (full paper), not just an abstract.

The category includes:

- Non-refereed articles based on invited scientific seminar presentations or posters.

The category does not include:

- Abstracts of conference presentations, extended abstracts, posters or PowerPoint presentations
- Brief research reports or brief review articles (Category B1)
- Peer-reviewed conference proceedings (Category A4)
- Articles not based on original research intended for application by the professional community (Category D1)
- Articles in professional conference proceedings (Category D3)

C Scientific books (monographs)

C1 Book

- Fulfils the definition of a scientific publication.
- Mainly includes unpublished material. New editions considered, if the book has been significantly modified compared with the previous edition.
- One or more authors are responsible for the entire book.
- The book has an ISBN number.

The category includes:

- Monographs by commercial publishers
- Monographs in publication series of scientific associations or similar

The category does not include:

- New editions, unless the text is significantly modified.
- Editing a book (possibly Category C2)
- Translations (possibly Category C2)
- Development or research reports or studies (Category D4)
- Textbooks, professional manuals or guides, dictionaries (Category D5)
- Popularised monographs (Category E2)
- Doctoral dissertations or other theses (Category G)

C2 Book (editor), chapters in research books, conference proceedings or special issue of a journal

- Edited publications in which the editor also has individual scientific input, such as an extensive introduction or foreword. The introduction or foreword is not entered separately under Categories A or B. Editing alone will not be classified as a publication (editing is an expert task). Category C2 is a special case of categories A1 (article), A3 (book section, chapters in a research book) and A4 (conference proceedings). In category C2 should be entered articles where the author has, besides writing an article, edited the publication.
- The publication channel meets the criteria for a scientific publication channel specified on page 3.
- The book has an ISBN number.

The category includes:

- Edited books, chapters in research books, conference proceedings or special issues of journals.
- Translations which include an extensive introduction or foreword by the editor.

For example: "New Alliances for Tourism, Conservation and Development in Eastern and Southern Africa".

http://www.acp-

edulink.eu/sites/all/files/documents/docs/Book%20New%20Alliances%20for%20Tourism.pdf -> Introduction: The chapter on New Alliances is not recorded as an article, but the entire book will be entered as an edited book (Category C2).

The category does not include:

- Edited books without an extensive introduction or foreword by the editor
- Translations without an extensive introduction or foreword by the editor (an expert task rather than a publication)
- Edited textbooks, professional manuals or guides, dictionaries (possibly Category D5)
- Edited popularised books (possibly E2)
- Forewords and introductions to development or research reports (recorded in Category D 4)

For example: "Kohti sosiaalisesti kestävää hyvinvointia. Näkökulmia Pohjanmaalta". http://www.uwasa.fi/materiaali/pdf/isbn 978-952-476-357-8.pdf

-> A brief foreword only without an individual scientific input. Articles in the book belong to Category A3 (book section). The book should not be entered as an edited book.

D Publications intended for professional communities

D1 Article in a trade journal

- Targets a professional community.
- The journal has an editorial board, but is not necessarily required to comply with peer review procedures.
- Journal in which the article is published has an ISSN code.

The category includes:

- Articles intended to be applied by a professional community published in a trade journal. The articles are not required to be based on original research
- Also other than peer reviewed articles in trade journals classified at levels 1-3 in the publication forum classification.

Example I

" Perimä, käsittely ja pH-arvo vaikuttavat sianlihan laatuun"

http://kehittyvaelintarvike.fi/teemajutut/perima-kasittely-ja-ph-arvo-vaikuttavat-sianlihan-laatuun-> Article in a trade journal

Example II

"Onko probiooteista apua laihdutuksessa? : Suolistomikrobiston muokkaaminen kiehtoo lihavuustutkijoita"

https://tuhat.halvi.helsinki.fi/portal/fi/publications/onko-probiooteista-(e0be5026-9625-4699-bfa5-1f306e7a135d).html

-> Appeared in Duodecim journal classified at level 1 in the publication forum classification, but the article is an editorial, not a refereed article.

The category does not include:

- Refereed journal articles (Category A1)
- Peer reviewed scientific articles in trade journals classified at levels 1-3 in the publication forum classification (Category A1 or A2)
- Review articles (Category A2)
- Chapters in research books (Category A3)
- Conference proceedings (class A4)
- Popularised articles, newspaper articles (Category E1)

Example I

Kuljettajan sairaus kuolonkolarien aiheuttajana

https://tuhat.halvi.helsinki.fi/portal/fi/publications/kuljettajan-sairaus(bb2a2003-3f33-4de5-9b01-93739469b0fb).html

-> A peer-reviewed scientific article classified at level 1 in the publication forum classification published in a trade journal. Should be entered in Category A1.

D2 Article in a professional book (incl. an introduction by the editor)

- Refers to articles in professional manuals or guides, professional information systems or professional books, text book material or short articles in encyclopaedias.
- Primary readership mainly includes persons trained in the field who apply the information in their practical work. Often domestic journals.
- Includes editor's introductory articles with a scientific input in a book. Editing itself will be regarded as an expert task rather than a publication, unlike in previous Amkota data collections in polytechnics.
- The book mainly has an ISBN number.

The category includes:

- Articles intended to be applied by a professional community published in a professional manual or guide or information system. The articles are not required to be based on original research.
- Textbook material intended for professional use.

The category does not include:

- Chapters in scientific research books (Category A3)
- Conference proceedings (Category A4)
- Published development or research reports or studies (Category D4)
- Entire textbooks, professional manuals or guides, dictionaries (Category D5)
- Forewords or introductions without scientific input

D3 Professional conference proceedings

- Conference proceedings printed or otherwise made publically available. E.g. publications distributed to conference participants or with restricted online access only are not publically available. If publications distributed on CD ROMs or USB flash drives have an ISBN code, they are public.
- A full written version of a conference paper (full paper), not just an abstract.

The category includes:

- Articles in professional conference proceedings.

The category does not include:

- Abstracts of conference presentations, extended abstracts, posters or PowerPoint presentations
- Scientific conference proceedings (Category A4)
- Published development or research reports or studies (Category D4)
- Brief forewords or introductions

Example

"A Place for Space – Pedagogy as a Bridge between Declarations and Realization" http://www.eera-ecer.de/ecer-programmes/conference/6/contribution/16764/

-> Extended abstract, not a full paper.

D4 Published development or research report or study

- A published development or research and development report or publically available study based on scientific work.
- The publisher usually is a non-scientific public party, such as a ministry or government research institute.
- Development or research reports are not primarily intended for a certain professional body but for the use of public servants and similar.
- D4 type publications are always treated as monographs, even if they consisted of several component articles. In that case, the authors of the publication should be entered as follows: As publication name (3.3.1.10) should be entered the full name of the report, as authors of the publication (3.3.1.4 and 3.3.1.6) all authors should be entered, the name of the parent publication (3.3.1.20) and editors of the parent publication (3.3.1.20) should be left vacant. Other reference data should be entered normally. The purpose of this is to ensure the fair treatment of higher education institutions in statistics on publication numbers.

The category includes:

- Studies conducted as commissioned research
- Published research/research and development reports
- So-called white papers
- Working paper and discussion paper type publications.

The category does not include:

- Publications intended solely for internal use
- Book sections or chapters in research books (Category A3 or B2).
- Monographs by commercial publishers (Category C1)
- Monographs published in publication series of scientific associations or similar (Category C1)
- Textbooks, professional manuals or guides, dictionaries (Category D5)
- Popularised monographs (Category E2)

D5 Textbook, professional manual or guide

- Refers to published professional books, textbooks, professional manuals or guides or dictionaries.
- The book has an ISBN number.

The category includes:

- Published textbooks or professional manuals or guides
- Dictionaries

The category does not include:

- Handouts, online or other similar material created solely for a single course

E Publications intended for the general public

E1 Popularised article, newspaper article

- Articles, reviews and editorials in publications targeting the general public.
- The text must be connected with the work of the author.

The category includes:

- Published popularised articles that are generally available in newspapers and journals targeted at the general public.

The category does not include:

- Articles in trade journals (Category D1)
- Brief comments or opinion letters.
- Articles written by the author while working for a newspaper.

E2 Popularised monograph

- Published non-scientific, popularised works. Excludes the author's editions.
- The text must be connected with the work of the author.
- The monograph must have an ISBN number.

The category includes:

- Published non-scientific, popularised works.

The category does not include:

- Professional manuals or guides (Category D5)

F Public artistic and design activities

For Category F publications, only quantitative data should be given, not metadata.

F1 Published independent work of art

- An artistic publication which is an independent entity that is not a part of some other work of art or that does not contain other parts which could be considered independent works of art.

F2 Public partial realisation of a work of art

- A published work of art may have an elemental and inseparable connection with a co-publication, but following the practices of the relevant sector of art, it can also be appreciated on its own (e.g. stage design for a play, a painting in a joint exhibition, a chamber musician's share in a concert, an actor's performance in a role).
- Work carried out to put a publication together should also be entered in this category, or selecting the parts that make up the whole, specifying the shared artistic principles of the whole and working on the partial realisations together with their authors to ensure that they fit in with the whole (for example directing a work on stage, artistic directorship/producing a concert).

F3 Artistic part of a non-artistic publication

- An artistic part of a publication whose context is not primarily artistic but which, however, is appreciated as art by the relevant artistic community (e.g. the design solution of a launched product, a demanding composition in an advertising film).

G Theses

G1 Polytechnic thesis, Bachelor's thesis

G2 Master's thesis, polytechnic Master's thesis

G3 Licentiate thesis

- Published licentiate theses (articles) are recorded even if the articles of a licentiate thesis had already been entered in Category A.

G4 Doctoral dissertation (monograph)

- Doctoral dissertations (monographs) published in the series of universities and university departments, published doctoral dissertations (monographs) or doctoral dissertations (monographs) published as the author's edition.

G5 Doctoral dissertation (article)

- Published doctoral dissertations (articles) are entered even if the articles of the doctoral dissertation have already been entered in Category A.

H Patents and innovation announcements

For patents and innovation announcements, only quantitative data should be given, not metadata.

H1 Granted patent

A patent is a set of exclusive rights granted by the state to an inventor for the professional utilisation of an invention, in return for which the inventor must allow public disclosure of the invention. A patent can be granted for an industrially applicable invention which is new and differs significantly from previous ones. Only a single international patent that has been granted should be entered per invention. In other words, patents granted for different areas/countries are not entered separately.

H2 Invention announcement

An invention announcement refers to a written notification (invention announcement form) submitted to a higher education institution, which the inventor must complete without delay subsequent to making an invention under the scope of the Act on the Right in Inventions made at Higher Education Institutions (369/2006).

The following figures related to invention announcements should be entered separately:

- number of invention announcements (H21)
- the share of the above worked on further (H22)
- the number of utilisation rights assumed by the higher education institution (H23)
- utilisation rights transferred further (H24)

I Audiovisual material, ICT software

For Category I publications, only quantitative data should be given, not metadata.

I1 Audiovisual material

- Audiovisual material which, on the basis of its content, cannot be entered in other sections.
- The author is usually the editor or producer of the material.
- Material which is in a serial form is entered only once, e.g. radio programme series.

The category includes:

- Audiovisual presentations and television and radio programmes documenting research results.
- Multimedia publications.

The category does not include:

- Television or radio interviews

- Artistic audiovisual material (possibly Category F)
- Audiovisual teaching material, e.g. online material solely produced for individual courses or similar
- Advertising or promotional material
- Multimedia software (possibly Category I2)

I2 ICT software

- ICT software published either commercially or freely.
- Only the first version of the software is included, unless recent versions include significant changes.

The category includes:

- ICT software

For example:

"TeamUP"

https://reseda.taik.fi/Taik/jsp/taik/Publication_Types.jsp?id=17111033

The category does not include:

- Artistic ICT material (possibly Category F)
- Multimedia publications (possibly Category I1)