

# Publication data collection instructions for researchers 2019

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## 1. Purpose of the instructions

Until now, the Ministry of Education and Culture has provided instructions on publication data collection, primarily aiming them at persons in charge of data collection in research organisations (higher education institutions, research institutions, university hospitals). The technical data collection instructions for publications have been part of an extensive data collection manual whose contents the Ministry updates each year in conjunction with research organisations.

The current instructions are based on the data collection manual, but they only apply to publication data collection. The instructions have been grouped and expressed in slightly different terms as compared to the manual in order to provide instructions that appeal to the researchers and are as intelligible to them as possible. The objective is to decrease the need of the organisations that collect data to maintain their own detailed instructions and to harmonise the description of publications. Each organisation organises the collection of publication data as per their wish. However, this is done in a manner which allows reporting on minimum data required by the Ministry. For this reason, organisations may give instructions that complement the current instructions.

The instructions will be updated as required, as the data collection procedure at the Ministry of Education and Culture changes.

The purpose of these instructions is to define scientific, professional, popular and artistic publications. Patents and invention notifications (publication type H) and audiovisual materials as well as IT and communication technology programmes (publication type I) will be defined in more detail in the annual data collection instructions by the Ministry of Education and Culture ([www.tiedonkeruu.fi](http://www.tiedonkeruu.fi)).

## 2. Publication data collection by the Ministry of Education and Culture

The purpose of the Ministry of Education and Culture for collecting publication data from higher education institutions, research institutions and university hospitals is to produce a knowledge base on the research activities and the social impact of the Finnish research system. The Ministry uses the publication data collected from higher education institutions not only as a knowledge base for calculating the basic funding allocated to universities and universities of applied sciences, but also for otherwise monitoring research and development activities. Statistics on the number of publications are available in the Vipunen statistics service of the Finnish National Board of Education ([www.vipunen.fi](http://www.vipunen.fi)).

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](#)). Classifications are used in an attempt to harmonise the knowledge base required for evaluating the publication activities of Finnish research organisations. 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.

### 3. Utilisation of publication data

In addition to science policy and statistical objectives, data collection serves the purpose of making publication data available for wide-scale utilisation. The publication data collected can be openly viewed in the JUULI publication data portal ([www.juuli.fi](http://www.juuli.fi)). In addition to this, the national information resource (VIRTA-publication data service) which was implemented in 2016 makes the information produced by publications within the Finnish research system available for other services as well. The information resource enables using the information in the services of, for example, research funders, in a way that researchers can transfer their publication information stored in the system of their home organisation to applications and project reports easily and automatically.

### 4. Definition of publication

The Ministry of Education and Culture publication data collection applies to publications that are significant for monitoring research and development activities. The data collection procedure does not apply to all publications derived from research activities. For instance, researchers give presentations and lectures as well as present their research at various events (e.g. posters), in the press and electronic media, but these performances and outputs are not part of the publication data collection by the Ministry of Education and Culture. Research organisations may collect information on the expert duties and researcher activities mentioned above, for their own needs.

The publications reported within the framework of the Ministry of Education and Culture data collection must meet the following criteria:

- The publication must be publicly available to anyone.
- The publication channel must have an editorial board or a publisher independent of the author, who makes decisions on publications published on the channel.
- The publication has not been previously published in a format which can be reported on in the data collection system.
- The publication's author is linked to the organisation.
- The publication is based on research or expert activities carried out by the author.

The aforementioned criteria also apply to documents that are distributed only in **electronic form** (such as online newspapers and platforms).

The definitions mentioned above only apply to scientific, professional and popular publications (publication types A to E). The art publications and artistic outputs, theses, patents, invention notifications, audiovisual materials and IT programs reported on will be defined in the annual data collection manual of the Ministry of Education and Culture.

#### Public nature

The publication is **of a public nature** if it is available to anyone without a charge or for a fee. For instance, a publication only distributed to conference participants or to those with limited online access is not publicly available, and therefore it cannot be reported on in the data collection procedure. The existence of an ISSN or ISBN identifier is regarded as an indication of a publication which was originally intended to be publicly available.

## External publisher

Publications that are reported must always be published by an **external publisher**. For this reason, privately printed documents or documents published on the author's website will not be reported. Furthermore, publications published by the author through the publication archives of individual libraries will not be reported, unless an external party independent of the researcher has decided to publish them.

## Novelty

Publications must include **new** scientific, professional or artistic content that has been previously unpublished in the format referred to in the data collection procedure. Thus, a publication that is saved, for instance, in a publication archive (e.g. arXiv.org) may be reported after its publication in a magazine or in another format that meets the reporting criteria. Translations of the authors' own texts, translations of texts by other authors or new editions of publications are not reported on unless the publication has been modified to a significant degree as compared to the previous edition. Furthermore, updates to online publications will not be reported as new publications.

## Author's link to an organisation

In general, the author's **link to an organisation** means that the organisation (higher education institution, research institution or university hospital) has enabled the creation of the publication and the research required for it. In practice, this means that the author is in the service of or has another contractual relationship with the organisation (post-graduate students according to the criteria given below) or that the organisation has otherwise enabled the publication.

In case of post-graduate students at universities, the publications of those post-graduate students will be recorded 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. If the author of the publication is not linked to the organisation based on a service contract or the right to a post-graduate degree, the author must have received the resources and the working environment (equipment, materials, research group) which enabled the active research from the organisation. As a result of the new status of universities, a docentship will become an honorary title and thus is not an adequate proof of affiliation to a university on its own.

The affiliation with the organisation is primarily established on the basis of affiliations cited by the author in the publication (in other words, the author gives the name of the institution as the author's home organisation in the publication). For this reason, researchers must be particularly careful to include the name of the organisation in the publication in the correct format. Publications will be recorded for the organisation 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.

A dissertation can be recorded both for the university where the degree was gained and for the organisation with which the researcher has a service contract or another contract.

Undergraduate student publications are not taken into account in the publication data collection by the Ministry of Education and Culture.

## Publication is based on research activities carried out by the author

The publication must be based on **research or expert activities** carried out by the author. For instance, publications exclusively related to extracurricular, third sector or business activities and not based on research activities will be unreported. Excluded are also publications, which are based on a research that has

no connection to the authors work at the affiliated organization. Nor will publications exclusively intended for marketing communications be reported on.

## 5. Types of publication

Publications can be coarsely divided into six groups based on their purpose and determined by the primary target group of the publication channel.

**Publication types A, B and C** are publications intended to promote science and to produce new information mainly for the use of the researcher's own scientific community. They fulfil the definition of a scientific publication.

**Publication type D** includes publications intended to disseminate research-based information for the use of a professional community. They fulfil the definition of a professional publication.

**Publication type E** includes publications disseminating scientific and professional information in the surrounding society.

**Publication type F** includes the public outputs of artistic activities.

**Publication type G** includes theses.

**Publication types H-I** are other publications resulting from research activities, the format of which differs from that of the previous categories.

### Definition of scientific publication (publication type main categories A, B and C)

The common feature of scientific publications is that they fulfil the following three conditions:

1. The publication must produce new information in relation to previous research data on the same subject.
2. The publication must be presented in a format that enables the verification of the research results and/or use of the research results in a new research, thus allowing other researchers to assess the research results and use them in their own work.
3. The publication channel for the publication specialises in publishing scientific research results, and it has an editorial staff consisting of experts in the field of science as well as a [peer review practice](#). (Note: non-refereed publications may also be published on scientific publication channels).

All criteria are applied according to the established practices for each field of science.

### Definition of professional publication (publication type main category D)

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. The target audiences of scientific and professional publications may be partly the same, and individual articles published in both groups may be very similar. Professional publication channels might utilize peer review practices.

Professional publication channels include the following trade journals:

*Metsälehti, Käytännön maamies, Sosiaalitieto, Kehittyvä elintarvike, Acatiimi, Journalisti, Arkkitehti, Sairaanhoidaja, Puutarha & kauppa, Ulkopoliitikka and Opettaja.*

Trade journals are an exception to this rule in that they also publish refereed scientific articles. Refereed scientific articles published in trade journals classified on levels 1 to 3 (e.g. *Duodecim, Suomen lääkärilehti, Liikunta ja tiede*) are entered under publication types A1 or A2 despite the fact that these journals are primarily aimed at the professional community. Non-refereed articles in these journals will be entered under publication type D1 (article in a trade journal).

Various analyses and reports based on scientific research and development produced to support political or professional decision-making, typically commissioned and published by a public party such as a ministry, an agency or a state research institution, are also reported on as professional publications. They are entered under publication type D4.

### **Definition of popular publication (publication type main category E)**

Popular publications refer to publications that disseminate information based on research and development to the public. Understanding their contents does not require particular familiarity with the field. Examples of popular publications include popular books, newspaper articles, popular magazine articles and network articles on online platforms taking a stand in public discussions. Also celebratory books, which are published for a certain person and the authors are private friends or colleagues of this person, are included in this category.

### **Definition of artistic publication (publication type main category F)**

Artistic publications refer to the public outputs of artistic activities. They can be either independent artistic outputs or partial realisations of collections following the conventions of different fields of art. The latter ones can be, for example, set design of a play, a painting in a joint exhibition or a role of an actor/actress. In addition, the publication type also contains those artistic partial realisations that are part of a publication which context is not primarily artistic. Such can be, for example, design of a commercial product or a demanding composition work for a commercial film.

### **Definition of peer review**

The peer review of scientific publications refers to a procedure by which a journal, conference or publishing house publishing research results requests that experts in the field of science carry out a preliminary evaluation of the scientific fitness for publication of manuscripts intended for publication. Publication data collection requires that the peer review meets the following criteria:

- The publication evaluators were independent in terms of the manuscript to be evaluated. Independent evaluators refer to accomplished researchers or other experts who are not editors of the publication series (journal or book series) or the publication (research book, journal special issue, conference publication).
- The process assesses the completeness of the material and the management of the theoretical framework, the reliability of how the research has been carried out and its accuracy, the originality of the results and their novelty value in relation to previous research, as characteristic of the field of science.
- The evaluation has covered the entire manuscript offered for publication rather than just an abstract or extract.

- The author has received a written referee statement of the peer review (original statement or a summary by the editorial staff/editor in chief).

In unclear cases, it must be possible to verify the peer review based on a written statement. As for the publications covered by reporting, peer review is required for publication types A1, A2, A3, A4, C1 and C2. If a Finnish science publisher uses the FFLS peer review identifier, only articles and separate books containing the identifier will be reported under the publication types mentioned above (<http://www.tsv.fi/tunnus>).



Peer review should not be confused with editorial review, which assesses the suitability of the text for the publication channel. Also, the review made by author in the same book cannot be considered as a peer-review unless performed as double-blind-review.

## Conference publications

Scientific conference articles are typically found in computer science and technical sciences. In most other disciplines, the conference publication is an intermediate stage before being published on another publication channel. The articles in the proceedings of one-off conference presentations are marked as book chapters (A3). Articles published in scientific journals, even if based on a presentation at a conference, are marked as journal articles (A1, A2). In the above cases, the publishing forum level is also determined in accordance with the publication type practices.

The publicity of a conference publication is determined in the same way as other publications, i.e. the publication must be publicly available. Publications are not publicly available in the materials of a single library (e.g. literature repository) or on the researcher's website. Nor are the publications public if the publication is distributed to the conference participants only or the publications are only available on the web with limited availability. For publications distributed in CD-ROM or USB memory format, the existence of an ISBN identifies the publication's publicity.

Various publications are published in conference publications. The Ministry of Education and Culture's data collection takes into account only the complete written versions of the conference paper (full paper) and the so-called short papers / Work-in-Progress -type papers. The types of articles are defined by the conference's own practice; the number of pages is not the only deciding factor. Abstract, extended abstract, posters or Powerpoint presentations of conference presentations are not taken into account. Category A4 covers only articles whose peer review has been performed on the basis of the entire manuscript, not just the summary.

## Publication type classification

The criteria set out on page 2 apply to all publication types (public availability, external editorial staff, novelty, the author's link to the organisation and the research-based nature of the publication). The table below indicates the minimum requirements for each publication type:

### A Peer-reviewed scientific articles

- Fulfil the definition of a scientific publication;
- Fulfil the definition of peer review;
- The journal/series publishing the article has an ISSN identifier, and research books have an ISBN identifier.

<p>- If the article is an introduction to a book or a journal, the author must provide a research contribution to it;</p>	
<p><b>A1 Journal article – refereed</b></p>	<ul style="list-style-type: none"> <li>- An article in a scientific journal, series or yearbook;</li> <li>- Mainly includes unpublished material;</li> <li>- Also, Short report -style medical publications that undergo the same peer review process as original articles</li> <li>- Original articles in professional journals that are listed on Publication Forum (Julkaisufoorumi) channel list (e.g. Duodecim, Suomen lääkärilehti) are included. Non-original articles and review articles are entered in category D1 regardless of whether the article has been peer-reviewed.</li> </ul>
<p><b>A2 Review article in a scientific journal</b></p>	<ul style="list-style-type: none"> <li>- A review article (e.g. review, systematic review, meta-analysis) in a scientific journal, series or yearbook;</li> <li>- Fulfils the definition of a scientific publication with the exception of the requirement to generate new information;</li> <li>- Is based on key original article material on the subject;</li> </ul>
<p><b>A3 Book chapter</b></p>	<ul style="list-style-type: none"> <li>- An article, an introduction or a preface in a published scientific research book consisting of articles by various authors;</li> </ul>
<p><b>A4 Article in conference proceedings</b></p>	<ul style="list-style-type: none"> <li>- Published regularly in the printed or otherwise publicly available publication of a scientific conference;</li> <li>- A complete written version of a conference presentation (full paper);</li> <li>- Conference publications are typical in the fields of IT sciences. In other fields, conference articles are mainly research books or special issues of journals;</li> <li>- The refereed articles in research books consisting of one-off conferences are entered under category A3 and the refereed articles of special issues in journals under categories A1 to A2.</li> </ul>
<p><b>B Non-refereed scientific articles</b></p> <ul style="list-style-type: none"> <li>- Fulfil the definition of a scientific publication;</li> <li>- The journal/series publishing the article has an ISSN identifier, and research books have an ISBN identifier.</li> <li>- If the article is an introduction to a book or a journal, the author must provide a research contribution to it;</li> </ul>	
<p><b>B1 Journal article</b></p>	<ul style="list-style-type: none"> <li>- Writings in scientific journals, such as brief case reports, brief review articles, editorials, book reviews, discussions, letters or comments. Publication types mentioned are included in category B1 even if they are peer-reviewed.</li> </ul>
<p><b>B2 Book chapter</b></p>	<ul style="list-style-type: none"> <li>- An article, an introduction or a preface in a published scientific research book consisting of articles by various authors</li> </ul>
<p><b>B3 Article in conference proceedings</b></p>	<ul style="list-style-type: none"> <li>- Published regularly in the printed or otherwise publicly available publication of a scientific conference;</li> <li>- A complete written version of a conference presentation (full paper);</li> <li>- Conference publications are typical in the IT field. In other fields, conference articles are mainly published in research books or special issues of journals;</li> <li>- The non-refereed articles in research books consisting of one-off conferences are entered under category B2 and the non-refereed articles of special issues in journals under category B1;</li> </ul>



<b>C Scientific books (monographs)</b>	
<ul style="list-style-type: none"> <li>- Fulfil the definition of a scientific publication;</li> <li>- Fulfil the definition of peer review;</li> <li>- The book has an ISBN number.</li> </ul>	
<b>C1 Scientific book</b>	<ul style="list-style-type: none"> <li>- The entire book was written by its author(s);</li> <li>- A new edition of the book may be reported on if the book has been modified sufficiently compared to the previous edition.</li> <li>- (Note. Non-refereed monographs are entered under category D4, D5 or E2)</li> </ul>
<b>C2 Edited book</b>	<ul style="list-style-type: none"> <li>- Edited scientific book or special issue of journals consisting of various articles by different authors;</li> <li>- The authors have been in charge of editing the book, and their names are indicated among the editors.</li> <li>- (Note. Non-refereed edited books are entered under category D6 or E3)</li> </ul>
<b>D Publications intended for professional communities</b>	
<ul style="list-style-type: none"> <li>- Fulfil the definition of a professional publication;</li> <li>- These also include publications in journals with no ISSN identifier or scientific books with no ISBN identifier</li> <li>- If the article is an introduction to a book or a journal, the author must provide a research contribution to it;</li> </ul>	
<b>D1 Article in a trade journal</b>	<ul style="list-style-type: none"> <li>- An article in a journal for the professional public;</li> <li>- An article in a scientific journal with no ISSN identifier.</li> </ul>
<b>D2 Article in a professional research book (incl. editor's introduction)</b>	<ul style="list-style-type: none"> <li>- An article in a professional manual or guide, information system or research book, text book material or short articles in an encyclopaedia.</li> <li>- Note. The introduction or preface must have research contribution</li> </ul>
<b>D3 Professional conference proceedings</b>	<ul style="list-style-type: none"> <li>- Published regularly in the printed or otherwise publicly available publication of a scientific conference;</li> <li>- A complete written version of a conference presentation (full paper)</li> </ul>
<b>D4 Published development or research report or study</b>	<ul style="list-style-type: none"> <li>- A published development or research report or study based on research or expert work</li> <li>- The publisher is generally a non-scientific publisher, usually a public party such as a ministry, a financier, a higher education institution or research institution.</li> </ul>
<b>D5 Text book, professional manual or guide or a dictionary</b>	<ul style="list-style-type: none"> <li>- A published professional book, text book, a professional manual or guide or a dictionary.</li> <li>- The book has an ISBN number.</li> <li>- (The category does not include handouts, online or other similar material created solely for a single course)</li> </ul>
<b>D6 Edited professional book</b>	<ul style="list-style-type: none"> <li>- An edited, published professional research book consisting of articles by various authors;</li> <li>- The authors have been in charge of editing the book, and their names are indicated among the editors.</li> </ul>
<b>E Publications intended for the general public</b>	

- Fulfil the definition of a popular publication	
<b>E1 Popularised article, newspaper article</b>	<ul style="list-style-type: none"> <li>- An article, review or editorial in a journal, series, research book or online platform for the general public (e.g. alusta.uta.fi).</li> <li>- The category does not include brief comments or letters to the editor. Long addresses in which the individual often uses the name of the home organisation will be taken into account in the data collection procedure (e.g. expert articles in Helsingin Sanomat, the Tebatti addresses in Talouselämä magazine).</li> <li>- Articles written by the author while working for the newspaper or magazine are not included in the category.</li> </ul>
<b>E2 Popularised monograph</b>	- A published non-scientific, popular book
<b>E3 Edited popular book</b>	<ul style="list-style-type: none"> <li>- An edited, published popular research book consisting of articles by various authors;</li> <li>- The authors have been in charge of editing the book, and their names are indicated among the editors.</li> </ul>
<b>F Public artistic and design activities</b>	
- Fulfils the definition of an artistic publication, see the definitions in the Ministry of Education and Culture data collection manual.	
<b>F1 Published independent work of art</b>	- An independent art publication that is not part of another work of art or does not contain elements that can be considered independent artistic publications.
<b>F2 Public partial realisation of a work of art</b>	<ul style="list-style-type: none"> <li>- An art publication can have a close, inseparable relationship with a co-publication, but it can still be valued as a separate work as per field-specific practice (for example, the staging of a play, a painting in a co-exhibition, a chamber musician's part in a concert, an actor's performance).</li> <li>- The compilation work for a publication is also entered under this category, i.e. the selection of parts, defining general artistic policies and working on the partial publications with the authors to make them fit within the publication (for example, directing a dramatic work, artistic directing/production of concerts).</li> </ul>
<b>F3 Artistic part of a non-artistic publication</b>	- An artistic part of a publication that is not primarily artistic but is valued as art within the art community (for example, the design of a product in the market, a demanding composition for an advertisement).
<b>G Theses</b>	
<b>G1 Polytechnic thesis, Bachelor's thesis</b>	
<b>G2 Master's thesis, polytechnic Master's thesis</b>	
<b>G3 Licentiate thesis</b>	- Note: If the work consists of articles, the articles will be entered separately under categories A to E;
<b>G4 Doctoral dissertation (monograph)</b>	- A doctoral dissertation (monograph) published in a university or institutional series, a published doctoral dissertation (monograph) or privately printed doctoral dissertation (monograph);
<b>G5 Doctoral dissertation (articles)</b>	- Note: If the work consists of articles, the articles will be entered separately under categories A to E;

<b>H Patents and innovation announcements</b>	
Definitions in the Ministry of Education and Culture data collection manual.	
<b>H1 Granted patent</b>	
<b>H2 Invention announcement</b>	
<b>I Audiovisual material, ICT applications</b>	
- Fulfil the definition of audiovisual material and ICT applications, see the definitions in the data collection manual of the Ministry of Education and Culture.	
<b>I1 Audiovisual material</b>	<ul style="list-style-type: none"> <li>- Published audiovisual material that does not fall within any of the other categories based on its content.</li> <li>- The author is usually the editor or the producer of the material.</li> <li>- Series comprised of several episodes or with a continuous plot are reported only once.</li> </ul>
<b>I2 ICT software</b>	- ICT software released as a commercial software or freeware.

### Selection of the publication type for the publication

		ARTICLES				SEPARATE BOOKS		
		IN JOURNALS		IN RESEARCH BOOKS	IN CONFERENCE PUBLICATIONS	MONOGR APHS	EDITED BOOKS	REPORTS
		Original	Review					
<b>REFEREED</b>	Scientific	A1	A2	A3	A4	C1	C2	
<b>NON-REFEREED</b>	Scientific	B1		B2	B3	D5/E2	D6/E3	
	Professional	D1		D2	D3	D5	D6	D4
	Popular	E1				E2	E3	

## 6. Publication forum

The [Publication type classification](#) classifies individual publications based on their format and target group, whereas the [Publication forum classification](#) is used to provide a level category for the publication channels (journal, series, conference or publishing house). Publications under various publication types may be published on an individual publication channel (e.g. both refereed and non-refereed publications may be published in a journal).

Publications published in channels listed for levels 1 to 3 are scientific publications (A to C), with a few exceptions: Some trade journals (e.g. *Suomen lääkärilehti*, *Duodecim*, *Liikunta ja tiede*) publish both refereed scientific articles and articles targeting the professional public.

However, the publication may be scientific, and it may be entered under publication types A to C though its publication channel has not been approved for level 1 to 3 in the Publication forum. These include local publication channels (e.g. the publication series of universities).

## 7. Fields of science classification

In publication data collection, fields of science refer to the subject matter of the publication. The field of science is not primarily determined based on the publication channel or the home department or unit of the authors but rather on the content of the specific publication.

One to six fields of education are given for the publication in the order of relevance of each field to the publication. The first field is the so-called primary field of science used, for instance, for the compilation of statistics on publications. Information on the field of science is essential for monitoring research activities.

The 2010 [Field of science classification by Statistics Finland](#) applies to the classification of publications.

## 8. Open access

With regard to open access, the publication data collection covers both the open access of the publication channel and the green open access of the publication. The open access status of the publication can be determined on the basis of this information. Regardless of the open access status of the publication channel, all publications should be self-archived to ensure long-term access to them. Open access means that the publication is available 1) immediately in the publisher's service and/or 2) stored in the organisation's publication archive or an archive in the field of science either immediately or after the embargo specified by the publisher has lifted. In both cases, open access means that the publication must meet the following criteria:

1. The publication can be read, printed out and copied on the Internet free of charge and in an accessible way, at least for non-commercial use.
2. The publication is publicly available in a service offered by the publisher or the research organisation which enables harvesting the publication's metadata and indexing its content for

other search services and supports making references to the publication and linking it to website addresses that are based on permanent identifiers (DOI, URN, Handle).

3. The publicly available version of the publication is either the final self-archived version of the publication or the final version published in the publisher’s service, depending on the publication contract or the publisher’s policy. If the publication is [refereed](#), the open access version must also be refereed.

In particular, for 2. condition, account must be taken of the different stages of development on technical systems for persistent identifier URLs. However, if the publication is not given a persistent identifier URL by the publisher’s service, a normal URL should be reported. Concerning self-archiving done at in domestic research organization’s the fulfillment of 2. condition is not necessary.

## 9. Data collected on publications

The reference data collected on the publication types A to E for 2019 have been listed in the table below:

### Reference data

<b>1 Publication type*</b>	<a href="#">Category under the Publication type classification.</a>
<b>2 Field of science of the publication*</b>	One to six fields of science according to the <a href="#">field of science classification of Statistics Finland</a> in the order of relevance of each field to the publication. The first, so-called primary field of science is mandatory.
<b>3 Organisation authors*</b>	Researchers at the <a href="#">organisation</a> involved in producing the publication.
<b>4 Organisation sub-unit*</b>	Faculties, departments or units of the organisation whose staff includes the authors of the publication.
<b>5 Publication authors*</b>	Full-length information about the author(s) of the publication in the format and order in which they were listed in the original publication or source database.
<b>6 Number of authors in publication*</b>	The total number of authors in the publication. If the number of authors exceeds 50, it is sufficient to enter ‘50’. If the authors comprise groups, the group members will be included as authors following the common practice in the field of science in question, or as agreed between the research groups.
<b>7 International co-publication* (yes/no)</b>	At least one author of the international co-publication is affiliated to a non-Finnish organisation (the author may also be affiliated to both a Finnish and foreign organisation). The foreign editor of the publication channel does not yet meet the criteria for international co-publications.
<b>8 Co-publication with a company* (yes/no)</b>	At least one author of the publication is affiliated to a national or international company (the author may also be affiliated both to a research organisation and a company). Company refers to an enterprise other than a state-owned group carrying out specific government tasks (such as VTT Technical Research Centre of Finland Ltd).

<b>9 Publication name*</b>	Publication name as given in the article or the book. If necessary, the name of a foreign-language publication may be reported on as a transliterated version.
<b>10 Year of publication*</b>	The year in which the publication was published for the first time as a version with full reference data.
<b>11 Volume</b>	Volume of the journal or series in which the article appeared.
<b>12 Issue</b>	Issue of the journal or series in which the article appeared.
<b>13 Pages</b>	Publication page numbers on which the article was published in the same format as in the original article or source database.
<b>14 Article number</b>	Article number used for the publication of the article (if applicable) in the same format as in the original article or source database.
<b>15 Publication language</b>	The language used to write the publication according to the <a href="#">Languages 2003 classification of Statistics Finland</a> .
<b>16 Journal / series name<sup>d</sup></b>	Journal/series name, as complete as possible, and spelled out (no abbreviations).
<b>17 ISSN<sup>a</sup></b>	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.
<b>18 ISBN<sup>a</sup></b>	Publication or parent publication ISBN number.
<b>19 Parent publication name</b>	Name of the edited book in which the article was published. The name of the parent publication of conference publications will be written as indicated on the publication.
<b>20 Parent publication editors</b>	Editors of an edited publication in the format and order in which they were listed in the original publication or source database.
<b>21 Publisher<sup>c</sup></b>	Publisher's name, as complete as possible, and spelled out (no abbreviations).
<b>22 Place of publishing</b>	The place or places given in connection with the publication's publisher.
<b>23 Country of publication</b>	Country of publication of the journal, series, monograph or parent publication according to the <a href="#">countries 2007 classification of Statistics Finland</a> .
<b>24 Internationality of publication* (domestic/international)</b>	The publisher of a Finnish publication is Finnish, or it was mainly published in Finland. The publisher of an international publication is not Finnish, or it was mainly published outside Finland. The publisher of a conference publication refers to the publishing house.
<b>25 DOI</b>	The DOI of the publication.
<b>26 Permanent website address</b>	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 (a publicly available version or a limited access version on the publisher's server).
<b>27 Open access*</b>	Open access to a publication according to the following classification: 0 = No answer

	1 = Publication published on an open access channel (all publications on the channel are openly accessible) 2 = Open access publication published on a hybrid channel (the channel contains both open access and non-open access publications)
<b>28 Source database code</b>	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).
<b>29 Publication channel ID</b>	Publication channel identifier according to the codes of the Publication forum (JUFO-ID).
<b>30 Higher education institution-specific ID of publication *</b>	The higher education institution's organisation-specific ID for the publication. Possibly used in situations where the publication information needs to be corrected afterwards and to clarify the handling of the publication information between higher education institutions and the ministry of education and culture
<b>31 Established conference name<sup>b</sup></b>	Typically, the established name of the conference repeated in the name of the proceedings parent publication, which does not change as the year, ordinal, place and time often mentioned in connection with the name
<b>32 Key words</b>	Key words that describe the content of the publication as accurately as possible.
<b>33 ORCID</b>	The ORCID identifiers of authors from the reporting organisation, e.g. 0000-0000-0000-0000, refer to <a href="http://www.orcid.org">http://www.orcid.org</a>
<b>34 Self-archived publication *</b> (yes/no)	The publication is self-archived in the publication archive of the organisation or the field of science, whether immediately or after a reasonable embargo specified by the publisher. The publication may be a so-called publisher's version or the author's final (refereed) version.
<b>35 Website address of the self-archived version<sup>e</sup></b>	The website address of the self-archived version of the publication stored in the organisation- or field-specific archive (e.g. URN).

\*) Mandatory for all publications.

a) Either the ISSN or ISBN identifier is mandatory for scientific publications (publication types A to C). If the publication has both ISSN and ISBN identifiers, both can be reported for publications in classes A and C.

b) Mandatory for conference proceedings (publication types A4, B3 and D3).

c) Mandatory for books and compilation articles (publication types A3, B2, C1, C2, D2, D4, D5, D6, E2 and E3)

d) Mandatory for professional and popular articles (publication type D1).

c) and d) either the name of the journal or name of the publisher is mandatory for publication type E1

e) Mandatory, if publication is self-archived (cf. section 34).

The reference data collected on the publication type F for 2019 have been listed in the table below:

### Reference information

1 Publication type*	Category under the Publication type classification.
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<b>2 Field of science of the publication*</b>	One to six fields of science according to the <a href="#">field of science classification of Statistics Finland</a> in the order of relevance of each field to the publication. The first, so-called primary field of science is mandatory.
<b>3 Organisation authors*</b>	Researchers at the <a href="#">organisation</a> involved in producing the publication.
<b>4 Organisation sub-unit*</b>	Faculties, departments or units of the organisation whose staff includes the authors of the publication.
<b>5 Publication authors*</b>	Full-length information about the author(s) of the publication in the format and order in which they were listed in the original publication or source database.
<b>6 Number of authors in publication*</b>	The total number of authors in the publication. If the number of authors exceeds 50, it is sufficient to enter '50'. If the authors comprise groups, the group members will be included as authors following the common practice in the field of science in question, or as agreed between the research groups.
<b>7 International co-publication* (yes/no)</b>	At least one author of the international co-publication is affiliated to a non-Finnish organisation (the author may also be affiliated to both a Finnish and foreign organisation). The foreign editor of the publication channel does not yet meet the criteria for international co-publications.
<b>8 Co-publication with a company* (yes/no)</b>	At least one author of the publication is affiliated to a national or international company (the author may also be affiliated both to a research organisation and a company). Company refers to an enterprise other than a state-owned group carrying out specific government tasks (such as VTT Technical Research Centre of Finland Ltd).
<b>9 Publication name*</b>	Name of artistic publication or partial realization (F2) name as given in, for example, in the exhibition. If necessary, the name of a foreign-language publication may be reported on as a transliterated version.
<b>10 Year of publication*</b>	The year in which the publication was published for the first time as a version with full reference data. For example, the date of a premiere or opening day of an exhibition.
<b>11 Publication language</b>	Language in which the publication is done (if possible to define in the case of the reported publication).
<b>12 ISSN</b>	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.
<b>13 ISBN</b>	Publication ISBN number.
<b>14 Parent publication name</b>	Name of the artistic publication of which or partial realisation the reported publication is (if F2 reported). Reported if applicable.
<b>15 Publisher</b>	Publisher's name, as complete as possible, and spelled out (no abbreviations).
<b>16 Place of publishing</b>	The place or places given in connection with the publication's publisher.

<b>17 Country of publication</b>	Artistic publications first country of publication and one which corresponds to the reported year of publication. Reported according to the <a href="#">countries 2007 classification of Statistics Finland</a> .
<b>18 Internationality of publication*</b> (domestic/international)	The publisher of a Finnish publication is Finnish, or it was mainly published in Finland. The publisher of an international publication is not Finnish, or it was mainly published outside Finland. The publisher of a conference publication refers to the publishing house.
<b>19 DOI</b>	The DOI of the publication.
<b>20 Permanent website address</b>	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 (a publicly available version or a limited access version on the publisher's server).
<b>21 Open access<sup>a</sup></b>	Open access to a publication according to the following classification: 0 = No answer 1 = Publication published on an open access channel (all publications on the channel are openly accessible)
<b>22 Source database code</b>	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).
<b>23 Higher education institution-specific ID of publication *</b>	The higher education institution's organisation-specific ID for the publication. Possibly used in situations where the publication information needs to be corrected afterwards and to clarify the handling of the publication information between higher education institutions and the ministry of education and culture.
<b>24 Key words</b>	Key words that describe the content of the publication as accurately as possible.
<b>25 ORCID</b>	The ORCID identifiers of authors from the reporting organisation, e.g. 0000-0000-0000-0000, refer to <a href="http://www.orcid.org">http://www.orcid.org</a>
<b>26 Self-archived publication</b>	The publication is self-archived in the publication archive of the organisation or the field of science, whether immediately or after a reasonable embargo specified by the publisher.
<b>27 Website address of the self-archived version<sup>b</sup></b>	The website address of the self-archived version of the publication stored in the organisation- or field-specific archive (e.g. URN).
<b>26 Field of art*</b>	One to seven reported field of arts for the publications.
<b>28 Role of the author</b>	Role(s) of the reporting organisations author(s). Especially related to the partial realisations the role of the author is important. For example, scenographer of a play, trustee of a exhibition, singer of a band, etc.
<b>29 Additional information: Field of art type category</b>	Type category following the classification from JURE-working group (2015). Field of art type categories can be reported in case they are collected in the reporting organization system. The type categories remind roles, but instead of being qualities of the author, they are qualities of the product. Reporting the roles is recommended.

<b>30 Additional information: Event</b>	Information about at the event where the publication was presented. Name of the event (for instance, “Midnight Sun Film Festival”, “Kaustinen Folk Music Festival”, etc.) to reported.
<b>31 Additional information: Additional information about the date of publishing</b>	Dates (for example, time frames ), number of shows, etc.
<b>32 Additional information: Municipality of publishing</b>	Place within the country of publishing
<b>33 Additional information: Other ID</b>	Identifiers of, for example, CD’s or note’s.

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\*) Mandatory for all publications

a) Mandatory of applicable

b) Mandatory, if publication self-archived