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# Manuscript Guidelines for Authors

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## Manuskriptrichtlinien für Autoren

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Information is provided on how to create manuscripts in terms of layout that are to be published in the journal *allgemeine vermessungs-nachrichten (avn)*. The contributions are to be created using the avn document template for Word.

**Keywords:** Guidelines, instructions, manuscripts

*Es werden Hinweise gegeben, wie Manuskripte, die in der Fachzeitschrift allgemeine vermessungs-nachrichten (avn) veröffentlicht werden sollen, layoutmäßig zu gestalten sind. Die Beiträge sind unter Verwendung der avn-Word-Dokumentvorlage zu erstellen.*

**Schlüsselwörter:** Manuskriptrichtlinien, Manuskripte

### 1 GENERAL INFORMATION

The journal *allgemeine vermessungs-nachrichten (avn)* publishes in its body articles from all areas of geodesy and geoinformation in German or in English language. The journal and all articles and figures it contains are protected by copyright. The publisher owns the exclusive copyright. Without approval of the publisher, any use beyond the narrow limits of the copyright law is prohibited. This particularly applies to reproductions, translations, microfilming as well as storage and processing in electronic systems. From the constructions described or brand names, etc., mentioned in this journal, no conclusions can be drawn whether the descriptions or names are protected. By submitting the manuscript, the author confirms that the manuscript - in particular individual parts such as images, drawings, etc. - are not subject to any third party rights.

### 2 REVIEW PROCESS

All scientific articles are subject to a review process in accordance with international standards (peer review). The editorial board forwards the submitted manuscripts in anonymous form to reviewers who are acknowledged experts in the subject area the manuscript deals with. The reviewers can directly accept the manuscript, provided that the requirements are fulfilled, and recommend its publication in the avn journal (accepted paper) or finally reject the manuscript in case of obvious, serious shortcomings or missing scientific character (rejected paper).

In case of rejection, another review will usually be obtained. In case of heterogeneous results of the reviews, the editorial board takes a decision. In case of minor shortcomings, the reviewers mostly decide on conditional acceptance, requesting the authors to revise their manuscripts and to take into account the concrete comments from the reviewer.

This recommendation can either go along with the requirement of a further review, or rereviewing can be omitted. Manuscripts that have successfully passed the review process will be published in the avn journal in the section "reviewed paper" together with the date of submission of the manuscript.

It is recommended to strive for the publication of articles in the avn journal as *reviewed paper*. However, non-reviewed articles can be published in the avn journal as well; they will be marked as *paper from practice* in the header within a separate section of each issue. The review process and the type of contribution are indicated in the table of contents of each avn issue.

The avn journal is listed in the bibliographic database Scopus. In addition to an English title, a German title is to be provided as well. Also, every paper requires an English and German abstract as well as English and German keywords.

## 3 LAYOUT OF THE AVN JOURNAL

In the avn journal, the articles are printed in two columns on A4 paper. The type area has a width of 165 mm and a height of 237 mm; the column width is 79.5 mm. The layout of the printed pages can be seen from the attached sample article.

The manuscripts are created on the basis of the avn document template for Word and are transferred to InDesign afterwards.

## 4 PREPARATION OF THE MANUSCRIPT

The manuscripts are to be prepared by the authors using a document template for *Microsoft Word* ([avn Template.dotx](#)).

The length of an article should not exceed approx. ten printed pages. One printed page can contain up to approx. 5,500 characters including blanks.

The points below are to be followed during preparation of the manuscripts:

- The new German orthography applies to the German-language title, abstract and keywords.
- Automatic hyphenation is **not** to be activated.
- The typographic characters “ ” and – are to be used for quotation marks and dashes, respectively.
- Information belonging together, such as numbers combined with measurement, quantity, and currency symbols, are not to be separated (3 %, 4 m, 50 kg); the use of a so-called “non-breaking” space has proven useful in this context (shortcut CTRL+SHIFT+SPACE).
- Abbreviations such as e. g. or i. e. are written with blanks (the non-breaking space should be used here as well).
- For numbers, a comma (1,000) should be used as thousands separator.
- Please only use fonts and special characters that are included in MS Word or MS Windows by default (TrueType fonts).

### 4.1 Document Template for Word

The document template *avn Template.dot* (for Word 2003 and 2007) respectively *avn Template.dotx* (for Word 2013, 2016) has been developed for the operating system Windows 7. Other environments may possibly cause system-related problems. Please inform the publisher on difficulties that may arise (see address on last page).

The file *avn-Vorlage.dot* needs to be copied into the folder where the Word user templates are stored. You can find the path on your computer, e. g. in Word 2003 under *Tools/Options* in the tab: *File Locations*. In Word 2007, you can find the path by clicking the *Office* button (top left), then the *Word Options* button at the very bottom and afterwards the *Advanced* option. Rather at the bottom of the window that opens next you can find the button *File Locations...*; after clicking the button, the *File Locations* dialog opens. The entry *User templates* contains the desired path.

### 4.2 Layout Design Using the Document Template

The document should be created and formatted primarily using the elements explained in the next sections. Please do not use your own paragraph formatting and leave the pre-set font characteristics unchanged.

No specific style exists for footnotes; they are to be created using the possibilities offered by Word.

#### 4.2.1 Title of Contribution

The English-language title is to be formatted using the style *avn:Contribution title\_en*, the German-language title using *avn:Contribution title\_ge*. In English-language titles, all words are generally capitalised except articles, particles and prepositions; at the beginning of a sentence and after a hyphen, capitalisation is used as well.

#### 4.2.2 Name(s) of Author(s)

The English-language and the German-language title is followed by the author's name: first name surname (without separating comma): In case of several authors, the authors are separated by commas. *avn:Author's name* is used for formatting.

#### 4.2.3 Abstract

Next, the English-language abstract (style *avn:Abstract en*) and a list of keywords follow (style *avn:keywords en*). The beginning of the text **Keywords:** is to be formatted in bold using *Ctrl + Shift + F* (or *Ctrl + Shift + F & Ctrl + Shift + K* in the German version of Word). Afterwards, the German-language abstract (style *avn:Abstract ge*) and the corresponding entries for the keywords (style *avn:Keywords ge*) follow; the beginning of the text **Schlüsselwörter:** is to be formatted in bold again using *Ctrl + Shift + F* (or *Ctrl + Shift + F & Ctrl + Shift + K* again in the German version of Word). Each of the two lists of keywords should comprise no more than ten words.

#### 4.2.4 Headings and Running Text

A maximum of three levels of heading are available for *structuring* the article: *Überschrift 1;Heading1*, *Überschrift 2;Heading2* and *Überschrift 2;Heading2*.

The running text of each section is formatted using *avn:Paragraph\_standard*. Please avoid adding empty lines manually after the paragraphs.

Emphasis in the text can be indicated using the font characteristic *italics*; underlining or boldface are to be avoided.

#### 4.2.5 Lists

The possibilities implemented in Word for providing bulleted or numbered lists partly show unpredictable effects. Different computers occasionally produce a differing layout. For this reason, specific formatting options for creating the avn manuscripts have been added to the document template. The options provided by Word are *not* to be used. The paragraph preceding the list is to be formatted using *avn:Paragraph\_before\_list*.

Three different types of lists can be used within the document. The first type marks the individual list items with “■”. This type of list is formatted using *avn:List\_simple*:

- First list item
- Second list item
- ...

The second list type numbers the individual items using numerals. It is formatted using *avn:List\_num*:

1. First list item
2. Second list item
3. ...

The third type numbers the individual items with lower-case characters; it is formatted using *avn:List\_alpha*:

- a) First list item
- b) Second list item
- c) ...

The list items only have *one* indentation level; further levels are not provided. The paragraph spacing of the last list item needs to be set to “*After: 6 pt*”.

#### 4.2.6 Figures

Figures (drawings and photographs) are printed in colour. They are to be directly inserted in the manuscript with a minimum resolution of **300 dpi (images)** or **1,200 dpi (line drawings)** in relation to the width of the type area. The following formats are permitted: TIFF, JPEG and PNG for raster graphics and PDF or EPS for vector graphics. Vector graphics should have a minimum line weight of 0.2 mm or 0.5 pt (no hairlines). The figures are

to be submitted as additional files together with the manuscript. The file name should be assigned according to the following pattern: *Author\_Fig xx.tif* (xx = figure number).

After having inserted the figure, the figure number and caption are to be added beneath the figure. Formatting is done using the style *avn:Figure\_cap*. When formatting, please pay attention that no text is wrapped around the figure (layout “In Line with Text”).

Within the text, the figures are to be cited in the form *Fig. 1*, etc. The additions *see* and *cf.* do not need to be provided.

## 4.2.7 Tables

No specific style exists for tables. The table heading is set in Times New Roman, 9 pt, bold. The actual table is set in Times New Roman, 9 pt, normal. Borders are to be added to the table. Before and after each table row, the paragraph spacing needs to be set to 1 pt. The line weight of the outside borders and of the inside borders is ½ pt.

Larger tables should be adjusted to type area width (16.5 cm), smaller tables to column width (7.95 cm).

The tables are numbered consecutively in the same way as the figures; the numbers are not created automatically. Table captions are to be formatted using the style *avn:Table\_cap*. Table and table number are to be set in bold (**Tab. 1**).

The table (*Tab. 1*, etc.) is cited in the same way as was explained in the previous section for *Figures*.

<b>Company</b>	<b>System names</b>
Trimble 4D	4D Control Software
Topcon	DC3
Leica	GeoMoS (Spider)
Geodata	Eupalinos
Sokkia	Geo <sup>3</sup> Axis
Terra Monitoring	SwissMon und Swisstrolly

**Tab. 1** | Example table

## 4.2.8 Formulae

Mathematical formulae are left-justified and are consecutively numbered at the right margin. Mathematical symbols are set in italics. Please use the style *avn:Formula* for placing the formula; it has a tab stop automatically set at 16.5 cm right-justified. The numbering (in brackets) is to be added manually.

Please use either MathType or the MS Word Equation Editor to create the formulae. The following line shows an example:

$$e = \sqrt{\frac{a^2 - b^2}{a^2}} \tag{1}$$

Simple formulae, e. g.  $x + y = z$ , can also be written in the running text using the Equation Editor. Further information on the notation of formulae is provided in DIN 1338 “*Formelschreibweise und Formelsatz*” (Writing and typesetting of formulae) from the year 1996.

The formulae are to be cited in the text using (1), etc.

## 4.2.9 In-Text Citations of Literature

When citing literature in the text, the names of the authors are enclosed in slashes without first names followed by the year of publication:

### One source:

- /Resnik 2018/ → one author
- /Witte & Sparla 2011/ → two authors
- /Lienhart et al. 2013/ → three or more authors

### Multiple sources by different authors:

/Becker 2005/, /Witte & Sparla 2011/ → two sources  
 /Becker 2005/, /Witte & Sparla 2011/, /Heunecke et al. 2008/ → more than two sources

### Multiple sources by the same author(s):

/Becker 2005a, 2005b, 2006/ → one author  
 /Witte & Sparla 2004, 2010/ → two authors

### Page numbers in the source:

/Becker 2005, p. 8/ → single relevant page  
 /Becker 2005, pp. 8–10/ → multiple relevant pages

## 4.2.10 In-Text Citations of Laws

Citations of laws are included in the text as follows:

*Name of law* *Year of judgment* *File number*

/BVerwG, 22. Mai 1987 – 4 C 19.85/

The full reference is not provided in the list of references, but in a footnote:

<sup>1</sup>BVerwG, Urteil vom 22. Mai 1987 – Aktenzeichen 4 C 19.85.

## 4.2.11 List of References

The heading of the list of references is named “References”; it is not preceded by an ordinal number (Style: *Überschrift 1; Heading 1*). The bibliographic data of the references includes the name of the author complemented by the year of publication in parenthesis. Afterwards, the title of the source and further bibliographic data follow. Multiple authors are separated by a semicolon; please always list all authors (do not abbreviate with et al). Multiple articles by the same author from the same year are distinguished by adding “a”, “b”, etc.

The style *avn:Ref* is to be used for formatting the references.

In the following, examples are provided for different types of sources.

### a) Monographs

*Author(s)* *Year* *Title of the book* *Edition* *Publisher*

Luhmann, T.; Robson, S.; Kyle, S.; Boehm, J. (2013): Close-Range Photogrammetry and 3D Imaging. 2<sup>nd</sup> Edition. W. de Gruyter, Berlin/New York.

*Place*

### b) Journal articles

*Author(s)* *Year* *Title of the journal article*

Mandlbürger, G. (2017): Interaction of Laser Pulses with the Water Surface – Theoretical Aspects and Experimental Results. In: allgemeine vermessungs-nachrichten (avn) 124(2017)11-12, 343 – 352.

*Name of the journal and abbreviation* *Vol.* *Year* *Issue* *Pages*

### c) Book chapters

*Author(s)* *Year* *Title of the chapter* *Eds.*

Kogure, S.; Ganeshan, A. S.; Montenbruck, O. (2017): Regional Systems. In: Teunissen, P.; Montenbruck, O. (Eds.): Springer Handbook of Global Navigation Satellite Systems. 1<sup>st</sup> Edition. Springer, Berlin/Heidelberg/New York, 306 – 337.

*Title of the book* *Edition* *Publisher* *Place* *Pages*

### d) Standards

*ISO/Standard* *Title of the DIN/Standard* *Part*

ISO 17123-2:2001-12: Optics and optical instruments – Field procedures for testing geodetic and surveying instruments – Part 2: Levels. ISO copyright office, Genf, Switzerland.

*Publisher* *Place*

e) Dissertations/Habilitations

<i>Author(s)</i>	<i>Year</i>	<i>Title</i>	<i>Type of work</i>	<i>Department/Universit</i>
Schulz, Th.	(2007)	Calibration of a terrestrial laser scanner for Engineering Geodesy.	PhD Thesis, ETH Zürich, No. 17036.	

  

<i>Series</i>	<i>No.</i>	<i>Place</i>

f) Online sources

<i>Author(s)/Source</i>	<i>Year</i>	<i>Title</i>	<i>URL</i>	<i>Date of access</i>
Wikipedia (2018):		Deformation (mechanics).	<a href="https://en.wikipedia.org/wiki/Deformation_(mechanics)#Strain">https://en.wikipedia.org/wiki/Deformation_(mechanics)#Strain</a>	(15.10.2018).

g) Online catalogues

<i>Author(s)/Source</i>	<i>Year</i>	<i>Title</i>	<i>Version</i>	<i>Name of the company</i>
Halfen-Deha (2003):		Technical Information HIT 03. Edition February 2003.		Catalog of the company HALFEN-DEHA Vertriebs-
				gesellschaft mbH, Liebigstraße 14, 40764 Langenfeld, Germany.

  

<i>Address of the company</i>	<i>URL (optional)</i>
	<a href="http://www.halfen-deha.de">http://www.halfen-deha.de</a>

#### 4.2.12 Address(es) of the Author(s)

The addresses of all authors are to be provided at the end of the manuscript after the list of references. The following information is required:

- Academic degree, first name, surname
- University/Company
- Institute/Chair (only for universities)
- Street | postcode, town
- Email address

Furthermore, a photograph of each author is required in size 2.5 cm (width) × 3.5 cm (height). Accepted image file formats are: TIFF, JPEG and PNG. A minimum resolution of 300 dpi is required.

## 5 SUBMISSION OF THE FILES

Please submit your manuscript and the related files only when they are ready for printing in order to keep subsequent modifications as low as possible.

Create a PDF file of your manuscript in addition to the Word file. The PDF file must be readable and printable. For this purpose, you can either use Adobe Acrobat Pro software or Freeware software such as PDF Creator (<http://de.pdf24.org>).

Please use the name of the author leading the preparation of the manuscript as file name (usually the author mentioned first) together with the appropriate file extensions. For the article *Schmidt et al.* for instance, the archive would be named *Schmidt.zip*, the Word and PDF files *Schmidt.doc* and *Schmidt.pdf*, respectively. The figures inserted in the document should additionally be included as separate files (cf. section 4.2.6).

Please submit the files e. g. as a ZIP file by email to the editorial board. If the data volume is too large (> 10 MB), you can also provide the editorial board with a temporary FTP access to be able to download the files from there.

## 6 GALLEY PROOFS

The manuscript is to be submitted to the editorial board as a Word file together with a proof in PDF format. For manuscripts of the type *reviewed paper*, the review process is started. Next, the manuscript is to be revised based on the comments and suggestions for correction provided by the reviewer. It is not uncommon that the manuscript is exchanged several times between author and reviewer via the editorial board. After having been assessed positively, the contribution receives the status *reviewed paper*. If a reviewer finally rejects the manuscript, a second reviewer will be consulted.

The publisher will typeset the manuscript. The author, or the lead author in case of multiple authors, will receive a PDF file of the typeset contribution via the editorial board in order to review the typeset and to be able to make small corrections. The corrections are to be kept at a minimum. The figures are displayed in the PDF with a

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reduced resolution to keep the file size small; they may appear blurred. In print, however, the figures will appear in full resolution.

The files are preferably exchanged by email.

## 7 COMPLIMENTARY COPIES, OFFPRINTS AND PRODUCTION RUNS

Authors of articles in the body of the avn journal receive five complimentary copies. On request, the publisher will send you a detailed offer on offprints and production runs. Please consider: offprints are an “*inexpensive way*” to make your article available to an even wider audience. The publication in the body of the journal is free of charge.

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