# The isodoc class*
# for letters, invoices, and more

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**Abstract**

The `isodoc` class can be used for the preparation of letters, invoices, and, in the future, similar documents. Documents are set up with options, thus making the class easily adaptable to user's wishes and extensible for other document types.

**Keywords:** letter, invoice, key/value, NEN1026

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# 1 Introduction

This class is intended to be used for the preparation of letters and invoices. Its starting point was Victor Eijkhout's NTG `brief` class[1], which implements the NEN 1026 standard. The `brief` class does not provide facilities for invoices and it is not easily extensible.

The goal for the `isodoc` class is to be extensible and easy to use by providing `key=value` configuration. Furthermore, texts that need to be placed on prescribed positions on the page (there are many such texts) are positioned by using the `textpos` package.[2] This provides a very robust construction of the page.

The class itself contains many general definitions, but variable data, such as opening, closing, address and many more, have to be defined using `key=value` definitions, either in the document or in a style file. The latter is indicated for definitions that don't vary on a per document basis, such as your company name, address, email address and so on. Thus if you run a company and also are the secretary of a club, you would have style files for each of them, plus one for your private letters or invoices.[3]

The general setup of a document producing one or more letters is (see figures 1–3, page 14–15, for examples):

```
\documentclass{isodoc}
\usepackage{<somestyle>}
\setupdocument{<generaloptions>}
\begin{document}
\letter[<addressee_specific_options>]{<letter_content>}
... more \letter calls ...
\end{document}
```

Similarly, the general setup of a document producing one or more invoices is (figure 4, page 17):

```
\documentclass{isodoc}
\usepackage{<somestyle>}
\setupdocument{<generaloptions>}
\begin{document}
\invoice[<addressee_specific_options>]{<invoice_content>}
... more \invoice calls ...
\end{document}
```

This document describes several examples. The distribution contains a directory `examples` where each of these has a complete set of files, ready to experiment with.

# 2 Class options

The isodoc class is based on the `article` class and you can use the same class options. Note, however, that if you change the font size from its default (10pt) to an other value (11pt, 12pt) this applies to all text, including headings, address label, et cetera. This is normally not what you want. If you really want to change the font size of, for example, the text body, do so with the usual font commands. Doing so will result in poorly balanced document, however.

# 3 Options for \setupdocument

Options are given as key=value pairs, separated by comma's. Extra comma's, including one behind the last pair, don't hurt. An option argument should be enclosed in braces if it contains comma's or equals signs.

[1] CTAN: ntgclass/briefdoc.pdf
[2] CTAN: textpos/textpos.pdf
[3] If you archive your documents in their source form only, it may be wise to work without a style file and set all options in the document itself!

As shown in the two examples in the previous section, there are three commands that can set options: `\setupdocument`, `\letter`, and `\invoice`. These commands will be further explained in the *Commands* section. `\setupdocument` is normally used to set options that are common to all letters or invoices in the document, like your company data; the optional arguments of `\letter` and `\invoice` set only those options that are different for each letter or invoice, such as the `to` and `opening` options.

This section lists and explains all available options. All options can be used in both the style files and in the document source, although several will normally only be used in style files (such as `company`) and some only in the document source (such as `to` or `opening`).

### Language

The options described here relate to the language used for the isodoc interface (headings, footings, date, payment data and so on.) This language is independent of the language you set with the `babel` or `polyglossia` packages. So, for example, you can write your document in English and use Dutch for the interface. Also, use of `babel` or `polyglossia` is not required.

Currently only a few interface languages are defined. As I am not particularly strong in the translation of administrative terminology, please feel free to send me corrections. And if you don't find your own language here, please send me your translations and your language will be added.

The `language` option sets the language, en-GB is used by default.

`language=...` sets the interface language to any language defined by the class. Currently these are: en-GB, en-US, fr-FR, de-DE, nl-NL, nl-BE, it-IT, es-ES, ca-ES, nb-NO, sr-RS; the hyphens in these names are optional, so you can, for example, also write enGB.

`ordinalss` sets ordinal suffixes in dates (like st, nd, rd, th) superscripted. The default is to keep them on the line. Note that you must use this option *before* any language option.

The definitions for the languages are in macros named `\isodoc@`*xxYY*, where xx stands for the language, and YY for regional variants. These macros contain definitions like:

```
\gdef\phonetext{telephone}
```

If you are not satisfied with isodoc's choices for your language, you can change those, but *only after loading the language in the preamble*, that is: you need to choose your language in a style file or in the `\setupdocument` statement, because otherwise isodoc will overwrite your changes with the definition for the `en-GB` (English) language.

### Logo

Information about the sender is defined here. The logo, by default, consists of a large company name on top a rule with, hanging under the rule, a contact person's data. You can define the latter either explicitly with the `logoaddress` option, or let it automatically be created from the contents of the options `who`, `street`, `zip`, `city`, `country`, and `foreign`, as far as you have defined those.

Definition in parts can be useful if you need them elsewhere in your document.

`logo` Switches the logo on; this is the default, but still useful if you have used the `nologo` option in your style file.

`nologo` Switches the logo off. This is useful if you have defined your own logo and have letter paper preprinted with that logo. You can then use `nologo` for the paper version and `logo` for a PDF to be sent by email.

`company=...` Your company name as it should appear in the logo (if you use the default logo) and in the return address (where it may get overridden by the `returnaddress` keyword.) For private documents, use your name or nickname here.

| | |
|---|---|
| `logoaddress=...` | Contact person's data; use \\ commands for line breaks. If you don't define this option, the data will be constructed from the following options. |
| `who=...` | Contact person's name; probably your own name. |
| `street=...` | Street in the sender's address. |
| `city=...` | City in the sender's address. |
| `zip=...` | Zip in the sender's address. |
| `cityzip` | Place zip *after* city, instead of before it (the default). |
| `country=...` | Country in the sender's address. Only used if `foreign` key was used. |
| `countrycode=...` | Sender's country code. For The Netherlands: NL |
| `areacode=...` | Sender's area code. For The Netherlands: 31 |
| `foreign` | Use this key if you send your letter to a foreign country. With it, your country will be added to return and logo addresses, your zip code will be prefixed with your country code, telephone numbers will be prefixed with `+31\,` (or whatever your `areacode` option has been set to) instead of just a 0. |

### Address window

The addressee's address is printed in a window. The width of the window is two columns (70 mm), and its contents are vertically centered in it. There are no limits to the vertical size of the window, other than the physical size of the window in the envelopes you use. The vertical position of the window's center is set with the `addresscenter` keyword. Horizontally there are two options: left or right.

| | |
|---|---|
| `leftaddress` | Places the window over columns 2 and 3; this is the default. |
| `rightaddress` | Places the window over columns 4 and 5. |
| `addresscenter=...` | Distance in mm of the center of the window from the top of the paper; the default value is 63.5 mm, fitting for a DL envelope for triple folded A4 (110x220mm) with a window at 50 mm from the top, 30mm high.[4] |
| `addresswidth=...` | The address window's width. The default is 70 mm (2 columns). |
| `to=...` | The addressee's address. New lines can be introduced with the \\ command; lines longer than 70 mm will cause extra newlines. The first part of this address, up to the first \\, is considered to be the name of the addressee, and is reported in the headings of page 2 and subsequent pages.[5] |
| `[no]return` | Do or don't print a return address on top of the addressee's address. This is useful if blank window envelopes are used. The return address is composed from the contents of the `company`, `street`, `zip`, `city`, and `country` keywords; it is printed in a bold script size sans serif font and is is separated from the addressee's address with a rule. The country will only be printed if the `foreign` keyword has been used. |
| `returnaddress=...` | The return address, if it is composed as just described, may become too long to fit in the address window. Or you may want to define a completely different return address. With the `returnaddress` keyword you can redefine the return address. Use \\ to insert bullets. |

[4] The middle of the window is at 50+30/2=65 mm from the top of the envelope; the paper is folded (see the folding options below) to give the folded paper a tolerance of 1.5mm on both sides in the envelope, so the address should be placed 1.5 mm higher at 65-1.5=63.5 mm.

[5] German users may want to create an address starting with *Herrn* on the first line and the addressee's name (*Hansen*) on line 2, and still have *Herrn Hansen* in the page header of page 2. You can do that by replacing the first `"\\"` with `"\newline \ "`.

### Header fields

Under the address window, a header is printed. The page is vertically divided in six columns, one each for the left and right margins, and four which, in the header, say: *Your letter of*, *Your reference*, *Our reference*, and *Date*, each with their respective contents under them. If the `subject` keyword is used, an extra line starting with *Subject:* will appear, followed by the contents on the same line and over a width of 2.5 columns. If needed, extra lines will be used.

`bodyshift=...` The header starts 98mm from the top of the paper, but it can be shifted with the `bodyshift` option.

`[no]header` The `noheader` option disables all header fields, the `header` option re-enables them (`header` is the default.)

`yourletter=...` first field in the header: the date of the letter this document is reaction on; empty by default.

`yourref=...` second field in the header: addressee's reference of the letter this document is reaction on; empty by default.

`ourref=...` third field in the header: your own reference for this document.

`date=...` fourth field of the header. The argument must have the form `yyyymmdd` or `yyyy-mm-dd`; it will be translated into a date like «May 3, 2006» if the document language is English, or into its translation in the actual language. The default value is «Undefined date», that is: the date of `\today` is not the default as this would make the date untraceable from the document source only. However, you can force the use of `\today` by providing the string `today` (*not* `\today`!) for the argument.

`forcedate=...` The restrictions of the `date` option can be overridden by using the `forcedate` option instead; you can thus enter anything you like for the date.

`subject=...` subject of this document; is placed under the other fields, and over the full text width, in a two-column table with "Subject:" (or the current language's equivalent) in the first column and the text, raggedright, in the second column. Use newlines if you want to restrict the width of the text. In some languages (`de-DE`) the "Subject:" is omitted and the subject text is typeset in bold face.

### Opening and Closing

A letter is started with an opening – something like «Dear John», and ended with a closing – something like «Regards,<newline>Betty», perhaps with an autograph (or white space) in between.

`opening=...` Dear John

`openingcomma=...` by default, the opening phrase is followed by a comma, but you can change that here.

`closing=...` Regards

`closingcomma=...` by default, the closing phrase is followed by a comma, but you can change that here.

`signature=...` Betty

`autograph=...` This keyword can have one of the 10 values 0–9:

- 0: no autograph; the `signature` appears right under the `closing`. This is the default if the `autograph` option is not used (using it without a value is equivalent to `autograph=2`).
- 1: generates extra whitespace between `signature` and `closing` for a hand-written autograph. The amount of whitespace is `\signatureskip`.
- 2–9: inserts one of eight autograph images which, with the `\autograph` command, may have been defined in the style file.

`enclosures=...` This keyword can be used to add a note, at the end of the document, which starts with **Enclosure:** followed by the value of the keyword. Multiple enclosures can be separated with \\ commands. If those are found, the starting text will be **Enclosures:**. It appears under the closing, with a white line in between.[6]

`copyto=...` This keyword can be used to add a note, at the end of the document, which starts with **Copy to:** followed by the value of the keyword. Multiple entries can be separated with \\ commands. It appears under the enclosures or, if those are absent, the closing, with a white line in between.[7]

### Footer fields

Footer fields are meant to be used for contact information. Any other information, like a VAT number, should go to a relevant place. The VAT number, for example, could go to the payment information in an invoice. Or it can be incorporated into a user- defined logo.

If the `footer` option is used, up to five footer fields are shown in the order defined in the `footorder` option; available fields, defined with options of the same name, are currently `website`, `phone`, `cellphone`, `fax` and `email`.

`[no]footer` enables or disables printing a page footer; there is room for up to four fields, if you set five fields, the last one will appear in the right margin.

`footorder=...` changes the order of footer fields. The argument should be a semicolon (;) separated list of field names. By default this string is defined as `website;phone;cellphone;email`. Empty fields can be inserted with extra semicolons.

`phoneprefix` prefix for phone numbers. The default is `0`; it will be changed into `+nn\,` (where nn is the area code) if the `foreign` option is used.

`phone=...` if defined[8], and phone occurs in the footorder string, prints «phone» in the page footer, with the contents under it, prefixed with a `0` or, if the `foreign` option was used, the area code (set with the `areacode` option.) Telephone numbers should thus be entered without a prefix.

`cellphone=...` same for cellphone...

`fax=...` fax...

`email=...` email...

`website=...` and website.

### Folding marks

Folding marks can be useful, particularly if your address window is used to its limits. Correctly folding your letter then prevents parts of the address to become invisible because of the letter loosely filling the envelope.

`nofold` Disable folding marks.

`foldleft` The folding mark is printed in the left margin.

`foldright` The folding mark is printed in the right margin. This is the default.

[6] The whitespace in between can be influenced (preferably in a style file) with the dimen `\enclosureskip`, default `\baselineskip`. Alternatively, set `\encldowntrue` to move the enclosures to the bottom of the page.

[7] The whitespace in between can be influenced with the dimen `\copytoskip`, default `\baselineskip`

[8] If you leave the footer entries undefined, or you define them as an empty string such as `phone=`, or `phone={}`, the entry will be displayed as «undefined» on a pink background. This may be useful in style files used by more than one user, each with their own values for these footer entries. If such a user forgets to use the corresponding key, he will be warned by the pink background.

| | |
|---|---|
| `fold2` | Folding mark at about halfway, set for tight fitting into a 220x162 mm envelope, with a tolerance of 2 mm at both sides. |
| `fold3` | Folding mark at about one third from the top, set for tight fitting into a 220x110 mm envelope, with a tolerance of 1.5 mm at both sides. |
| `fold=...` | For non-standard envelopes and paper formats the position of the folding mark can be set at any position (in mm) from the top of the paper. |

### Payment data

In invoices you probably want to make clear where you want your debtor to transfer his money to. You can do so by calling the `\paymentdata` command, which generates a little table containing these data. The contents of this table can be defined with the keywords below; they are listed in the order presented here, but the order, as well as the selection of data can be modified with the `paymentorder` option. Only non-empty data will be listed.

| | |
|---|---|
| `term=...` | Payment term in days; default is 30. |
| `bankname=...` | The name of your bank, like Barclays. |
| `bic=...` | Your bank's BIC code in lower case; will be typeset in small caps. |
| `routingno=...` | Your bank's routing number. |
| `iban=...` | Your account's IBAN code in lower case; will be typeset in small caps. |
| `accountno=...` | Your bank account number. |
| `accountname=...` | Your bank account's ascription, probably your initials, followed by your last name. |
| `payref=...` | Reference to the invoice. If, before the `\invoice` call, it's empty, it will be replaced with the value of `\ourref` (used in the header fields, may also be empty.) Suppress it by making it empty in the `\invoice` call itself: `\invoice [payref=]{...}`. |
| `vatno=...` | Your VAT reference number. |
| `chamber=...` | Your Chamber of Commerce subscription number. |
| `paymentorder=...` | Sets the selection and order of the above data. The argument must be semicolon-separated string containg the names of the data to be listed (if non-empty.) The default for the string is `term;bankname;bic;routingno;iban;accountno;accountname;payref;vatno;chamber`. |
| `currency=...` | Currency; default is euro. Appears in the invoice table, not in the payment data table. |
| `creditorid=...` | The SEPA-related creditor id.[9] |
| `mandateid=...` | The SEPA-related mandate id. |

### Accept data

These keys pertain to data needed for accept forms:

| | |
|---|---|
| `acceptaccount=...` | Payer's bank account number |
| `acceptaddress=...` | Payer's address lines, separated with `\\` |
| `accepteuros=...` | Euro part of the amount to be paid |
| `acceptcents=...` | Cents part of the amount to be paid |
| `acceptdescription=...` | Description to be quoted on the accept form |
| `acceptdesc=...` | Short version of the description for the detachable strip of the form to be kept by the payer |
| `acceptreference=...` | Reference |

[9] Currently the texts for the `creditorid` and `mandateid` options, which are defined in `\creditoridtext` and `\mandateidtext`, are the same in all languages («Creditor ID» and «Mandate ID») except for the Dutch language. Please inform the author about the correct translation in your language!

**Miscellaneous**

| | |
|---|---|
| `[no]fill` | Use the `fill` keyword to justify text both left and right; the default is `nofill`: left justification only. |
| `shift=...` | The many text positions in isodoc are defined in millimeters, but sometimes printers show an aberration in their horizontal or vertical printing position. You can correct for this with the `shift = x,y` option, where x and y (both 0 by default) shift the output to the right and down, respectively, in millimeters. |
| `[no]vertical` | Invoice tables are printed with a vertical line between description and amount. The `novertical` option suppresses this, the `vertical` option restores it. |

# 4 Commands

`\showkeys` The `\showkeys` command can be useful for debugging. It prints a table showing the option keys described in the previous section, and their current values.

`\setupdocument` Most of the setup, both in the style files and in the documents themselves, is done setting options in a call to the class-defined `\setupdocument` command. The options can be either a key/value pair, or just a key. Options with values and those without may occur in any order, with the exception of `addresscenter` (see there.) Values need their surrounding {}'s only if they contain any comma's. The *Options* section explains the available options.

Most of the options have a corresponding command with the same name. Although not very often, it may sometimes be useful to have those commands available. These are the options with a corresponding command:

| | | | | |
|---|---|---|---|---|
| acceptaccount | areacode | country | mandateid | street |
| acceptaddress | bankname | countrycode | opening | subject |
| acceptcents | bic | creditorid | ourref | term |
| acceptdesc | cellphone | currency | payref | vatno |
| acceptdescription | chamber | email | phone | website |
| accepteuros | city | enclosures | phoneprefix | who |
| acceptreference | closing | fax | returnaddress | yourletter |
| accountname | company | iban | routingno | yourref |
| accountno | copyto | logoaddress | signature | zip |

So you could write in your letter: «Please send the money to my bank account: `\accountno\` as soon as possible.»

`\letter` The `\letter` command produces one letter and can be called multiple times. It has two arguments. The first argument is optional and must be a list of `key=value` pairs. The options set here are usually those that vary among different letters. The second argument contains the letter's content. This content will, depending on the options set, automatically be surrounded by an opening, a closing, an autograph, a signature and a remark about any enclosures. The first page of each letter will be decorated with a logo, the addressee's address, a return address, various reference fields, a footer, a folding mark—all as defined by `key=value` pairs in `\setupdocument` or in the `\letter` command itself.

The second an following pages will have a heading, quoting the name of the addressee and a page number. Examples of letters can be found in the section *Usage: letters*.

`\invoice` The `\invoice` command is essentially the same as the `\letter` command, except that the opening is always «INVOICE», and the content (argument 2) is largely composed using the `\itable`, `\iitem`, `\itotal`, and `\paymentdata` commands described hereafter. Closing, autograph, and signature are disabled.

In the Netherlands, invoices can be provided with an accept form on the lower third part of the page. If the `accept` option was used, this accept form will be filled with the available data, in the `ocrb` font where needed.

`\itable` The following commands pertain to invoices: The `\itable` command uses `tabularx` to create a two-column table. The first column of the table will have the header «Description»

(or its equivalent in the language selected), the header of the second column says «Amount (EUR)». The argument of `\itable` should contain the contents of the table and could be of the form:

```
item 1 & amount 1\\
item 2 & amount 2\\
...
item n & amount n\\\cline{2-2}
Total  & amount\\
```

However, the next two commands may be used to enter these data more cleanly, and they provide better line spacings:

`\iitem` The `\iitem{item}{amount}` command (`iitem` stands for Invoice Item) is equivalent to writing `item & amount\\`.

`\itotal` The `\itotal[...]{amount}` command (`itotal` stands for Invoice total) is equivalent to writing: `\cline{2-2} Total & amount\\`, with the additional advantage that the word «Total» will be replaced with its equivalent in the current language, or, if the optional argument is given, with that optional argument. Thus, the argument to the `\itable` command show above can also be written:

```
\iitem{item 1}{amount 1}
\iitem{item 2}{amount 2}
\itotal[Subtotal]{amount}
...
\iitem{item n}{amount n}
\itotal{amount}
```

`\paymentdata` The `\paymentdata` command prints a little table with accounting information needed by the creditor for paying the invoice. It is constructed using the values of the options `term`, `bankname`, `bic`, `routingno`, `iban`, `accountno`, `accountname`, `payref`, `vatno` and `chamber`, in that order, and as far as they are non-empty.

`\autograph` The `\autograph` command, which will normally appear in a style file, serves to define up to eight autographs based on PDF, JPEG or PNG images. In the following it is important to know that the closing always remains at the same position: two `\baselineskips` under the end of the text body; autographs and the signature will be positioned relative to this fixed closing.

The selected autograph (argument 1) will be drawn near the closing (*Best regards*) if you use the `autograph` option with a value from 2 through 9. The position of the signature (*Betty*) will depend on the argument 4 of `\autograph`. `\autograph` has 6 arguments, defined in the table below. The arguments 3, 4 and 5 are integer percentages of the height of the image (argument 2). This means that you can change the height of the image and still keep the positions of closing, signature and the left margin at the same relative positions in the image. These percentages may be negative, or larger than 100%.

arg 1: 2,3,...9: autograph number; will be translated internally to define `\autographA`, `\autographB`... `\autographH`
2: the height of the image (a dimen)
3: the vertical position (%) of the baseline of the closing (Regards,) from the top
4: the vertical position (%) of the baseline of the signature (John Letterwriter) from the closing
5: the distance (%) the autograph outdents in the margin
6: the image (jpg, png, pdf...)

**How to design an autograph in 4 steps:**

1. Make a scan of your signature on a white background. Remove the white background using an image manipulation program such as the `gimp` (*layer* ⇒ *transparency* ⇒ *color to alpha*) and save it as a PNG image. Removing the background is only necessary if you plan to move the image over the text body, which would then be covered by the white

background – closing and signature will be printed *over* the image.
2. Guess where you want the closing's baseline to appear in the image, expressed as an integer percentage of the image height from the top of the image. Use this number for argument 3.
3. Same for the signature, to use as argument 4.
4. Same for the text body margin: distance of it from the left side of the image, expressed as an integer percentage of the image *height*.

\logo The `\logo` command is internally used to define the default logo; you can redefine it with `\renewcommand{\logo}{...}`. An example of logo redefinition can be found on page 13.

Several symbols are frequently used in letters and invoices. These are usually taken from marvosym.sty; however, marvosym collides frequently with command names used in isodoc. So they have gotten their own names here:

\LetterSymbol
\EuroSymbol
\EUR
\EmailSymbol
\PhoneSymbol
\MobileSymbol

| command | ASCII | result |
|---|---|---|
| `\LetterSymbol` | 66 | ✉ |
| `\EuroSymbol` | 164 | € |
| `\EUR` | 99 | € |
| `\EmailSymbol` | 107 | ✉ |
| `\PhoneSymbol` | 84 | ☎ |
| `\MobileSymbol` | 72 | |

# 5 Usage: letters

Usage of the class is best explained by example.

## 5.1 A simple letter

Here is the latex source for a small letter; its result appears in figure 1:

```
\documentclass{isodoc}
\usepackage{letter,kantlipsum}
\setupdocument{
         to = {TeX Users Group\\
               1466 NW Naito Parkway, Suite 3141\\
               Portland, OR 97208-2311\\
               U.S.A
              },
     ourref = 1029,
 enclosures = isodoc documentation\\LPPL documentation,
     copyto = {Dutch TeX User group, NTG},
    subject = An example letter using the isodoc class --
               with an extra long subject extending over two lines.,
  autograph,foreign
}
\begin{document}
\letter[language=itIT]{
  This letter was composed using the \LaTeX{} isodoc class.
  \par\kant[1]
}
\end{document}
```

This source essentially shows three items:
1. the inclusion of a package `letter`; we'll come to that shortly.
2. the command `\setupdocument` called with many `key=value` arguments, each defining one of the texts that go into the letter.
3. the command `\letter`, enclosing the body of the letter; just to give the letter some real body, a small text has been included using `\input`.

The Letter Company

Wybo Dekker
Deilsedijk 60
NL-4158 CH Deil
The Netherlands

**Letter Cy • Deilsedijk 60 • Deil**

TeX Users Group
1466 NW Naito Parkway, Suite 3141
Portland, OR 97208-2311
U.S.A

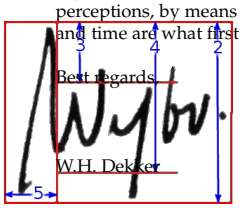
| Vostra lettera del | Vostro riferimento | Nostro riferimento | Data |
|---|---|---|---|
| | | 1029 | Undefined date |

Oggetto: An example letter using the isodoc class – with an extra long subject extending over two lines.

L.S.,

This letter was composed using the LaTeX isodoc class.

As any dedicated reader can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogisms of practical reason are what first give rise to the architectonic of practical reason. As will easily be shown in the next section, reason would thereby be made to contradict, in view of these considerations, the Ideal of practical reason, yet the manifold depends on the phenomena. Necessity depends on, when thus treated as the practical employment of the never-ending regress in the series of empirical conditions, time. Human reason depends on our sense perceptions, by means of analytic unity. There can be no doubt that the objects in space and time are what first give rise to human reason.




Best regards,

W.H. Dekker

**Allegati:**
isodoc documentation
LPPL documentation

**Per conoscenza a:**
Dutch TeX User group, NTG

| sito web | telefono | cellulare | e-mail |
|---|---|---|---|
| www.xs4all.nl | +31 87 8748496 | Undefined cellphone | wybo@xs4all.nl |

Figure 1: Minimal letter example

Of course this is not all of the information needed to create a letter. For example, there should be a logo, telling the addressee who I am and there should be contact information such as my address, telephone number and so on. This is where the included `letter` package plays its part. Here is an example of such a style file:

```
\NeedsTeXFormat{LaTeX2e}[1999/12/01]
\ProvidesPackage{letter}
  [2010/08/21 v1.1 Letter Company style file for isodoc]
\RequirePackage{pxfonts}
\definecolor{headcolor}{gray}{.3}
\definecolor{headingcolor}{gray}{.3}
\encldowntrue

\setupdocument{return,footer,fold3,
  areacode        = 31,
  autograph       = 0,
  city            = Deil,
  closing         = Best regards,
  company         = The Letter Company,
  country         = The Netherlands,
  countrycode     = NL,
  email           = wybo@xs4all.nl,
  opening         = L.S.,
  phone           = 87\,8748496,
  returnaddress   = Letter Cy\\Deilsedijk 60\\Deil,
  signature       = W.H.~Dekker,
  street          = Deilsedijk 60,
  website         = www.xs4all.nl,
  who             = Wybo Dekker,
  zip             = 4158 CH,
}
\autograph{2}{35mm}{34}{83}{28}{signmarked}
```

So in the style file, too, `\setupdocument` is used to register information that will be common to almost all of my letters. The `\autograph` command sets up an autograph, based on an image file. Apart from the code shown here, a style file can contain definitions for more autographs, and a definition for a logo. Without the latter, a default logo is produced. Note also that I have included defaults for `opening`, `closing`, and `signature` in the style file, and that I did not override those in the letter's source.

The letter source example shown above, in combination with this style example, compiles to the letter shown in figure 1. This example illustrates some aspects of isodoc:

- At the top, you see the default letterhead (logo). You can create your own logo by redefining the `\logo` command.
- Under it is the address. It has a return address in script sized sans serif boldface over it, because the `return` key has been used. A return address is useful if you send your letters in a standard window envelope. The positioning of the address is done in the style file, using the `addresscenter` and `leftaddress` or `rightaddress` keywords.
- The paper is vertically divided in six equally wide columns. The outer two columns are the left and right margins, the second to fifth columns contain header and footer fields.
- The «Your reference» and «Our reference» fields have not been set (with the `yourref` and `ourref` keys) and therefore stay empty by default, the date field has also not been set, but it should be. Therefore, the default value is «Undefined date», and a warning is issued by a pink background.
- A folding mark has been printed in the extreme right margin, such that on folding the paper along it, it will correctly fit in a 220 x 110 mm envelope; this has been achieved by using the `fold3` key.
- In between closing (*Best regards,*) and signature (*W.H. Dekker*) an autograph has been placed. This was done by setting the option `autograph`, which has a default value of 2. Alternative values are `0` (nothing between closing and signature), `1` for white space where an autograph can be placed with a pen after printing, or one of the values `2-9`,

which may have been associated with other autograph images. In this case, I have used an autograph image in which I have drawn the boundary box and the *height* (argument 2), *closing* (3), *signature* (4), and *outdent* (5) positions defined in the `\autograph` command (see the section *Commands*) with red lines.

- The bottom of the letter has (up to) four fields with contact information. This is useful if your logo does not show that information. If it does, you can omit these fields by using the `nofooter` key, or by not using the `footer` key, depending on the default set in the style file.
- Note that the footer fields include a cellphone field, but the cellphone number has not been defined, which results in an error message.

## 5.2 Multiple letters, redefined logo

Let's try another illustrative example, see figures 2 and 3: we use a modified style file, with a redefined logo, so we don't need a page footer; we use preprinted right-windowed envelopes, so a return address is not needed. Here is the style file (`logoletter.sty`):

```
\NeedsTeXFormat{LaTeX2e}[1999/12/01]
\ProvidesPackage{logoletter}
  [2010/08/21 v1.1 logoletter style file for isodoc]
\usepackage{fontspec,polyglossia}
\hypersetup{hidelinks}
\setupdocument{
  nofooter,fold2,autograph=1,
  company         = The Shiva Shakti Foundation,
  who             = Wybo Dekker,
  street          = Deilsedijk 60,
  city            = Deil,
  zip             = 4158 CH,
  country         = The Netherlands,
  countrycode     = IN,
  areacode        = 31,
  phone           = {87\,8748496},
  cellphone       = {6\,15492070},
  fax             = {},
  website         = wybo.xs4all.nl,
  email           = wybo@xs4all,
  accountno       = {304046221},
  iban            = nl61pstb0006238747,
  bic             = pstbnl21,
  addresscenter   = 70,
  rightaddress
}
\autograph{2}{19mm}{17}{93}{21}{signblue}

\definecolor{headcolor}{rgb}{.14,.33,.43}
\definecolor{shivablue}{rgb}{.14,.33,.43}
\definecolor{shivaback}{rgb}{.97,.87,.71}

\renewcommand{\logo}{\if@isodoclogo
  \pagecolor{shivaback}
  \begin{textblock}{70}(15,13)
    \includegraphics[scale=.3]{shiva-shakti.png}
  \end{textblock}
  \begin{textblock}{105}(88,15)
    \begin{center}
      \fontspec{ChopinScript}
      \noindent\color{shivablue}{\Huge The Shiva Shakti Foundation}\\[2ex]
      Main Building\quad
      567\textsuperscript{th} floor\quad
      Room 123\quad
```

```
      Bangkok
    \end{center}
  \end{textblock}\fi
}
\setmainfont[Ligatures=TeX]{Fontin}
\setdefaultlanguage{english}
\setotherlanguage{dutch}
```

The letter source does not use the `autograph` key, so the default value of 2 is used; we write it in Dutch and use a larger text, just to see what happens if more than one page is generated:

```
%!lualatex
\documentclass[11pt,twoside]{isodoc}
\usepackage{logoletter}
\setupdocument{
      ourref = 1029,
  yourletter = May 12,
     yourref = MAPS \#34,
        date = today,
     closing = Kind regards,
   signature = Wybo Dekker,
  enclosures = Isodoc documentatie,
     subject = Sample letter with the isodoc class,
   autograph = 2,
    language = en-GB
}
\newcommand{\letterbody}{%
  This is an example of a letter made with the isodoc class.
  It has been compiled with luaLaTeX.
  Note that the date was set to |today|, so the date above the
  letter depends upon the day of compilation.

  The picture in the logo was designed by Pieter Weltevrede.
  The text in the logo is Chopin Script, the body text is Fontin.
  The text\footnote{gathered from the \TeX-distribution} has no meaning,
  its only goal is to get a long letter.
  It's in dutch, so we select that language; note that language setting has
  nothing to do with the language setting in \textbackslash setupdocument.
  \\[2ex]
  \begin{dutch}
    \par\input{body}
  \end{dutch}
}

\begin{document}
\letter[to = Wybo Dekker\\
             Deilsedijk 60\\
             4158 CH Deil,
             opening = Beste Wybo
       ]{\letterbody}
\letter[to = MAPS redactie\\
             Spuiboulevard 269\\
             3311 GP Dordrecht,
             opening = Beste Taco
       ]{\letterbody}
\end{document}
```

In this case, the same letter had to be sent to two different people, with different openings and addresses of course. So the letter's body is separately defined and the `\letter` command is called twice, with the same body, but different `to` and `opening` keys. Figures 2 and 3 show the first two pages (the first letter) of this document, which actually has four pages.

The Shiva Shakti Foundation

Main Building 567th floor Room 125 Bangkok

Wybo Dekker
Deilsedijk 60
4158 CH Deil

| Your letter of | Your reference | Our reference | Date |
|---|---|---|---|
| May 12 | MAPS #34 | 1029 | 16th July 2020 |

Subject: Sample letter with the isodoc class

Beste Wybo,

This is an example of a letter made with the isodoc class. It has been compiled with luaLaTeX. Note that the date was set to |today|, so the date above the letter depends upon the day of compilation.

The picture in the logo was designed by Pieter Weltevrede. The text in the logo is Chopin Script, the body text is Fontin. The text[1] has no meaning, its only goal is to get a long letter. It's in dutch, so we select that language; note that language setting has nothing to do with the language setting in \setupdocument.

Typografie wordt meestal toegepast om het doel en de inhoud van een tekst te ondersteunen. Een tekst moet bijvoorbeeld prettig leesbaar zijn. Daarom worden teksten in boeken en kranten vaak uit een lettertype met schreef gezet, maar op het beeldscherm juist vaak met een schreefloos lettertype zoals Verdana of Tahoma opgemaakt.

Voor een reclame- of waarschuwingsbord is het van belang dat woorden opvallen door ze met felle kleuren te accentueren. In een lange tekst wordt het juist als storend wordt ervaren wanneer er vetgedrukte woorden uitspringen en wordt bij voorkeur cursivering gebruikt om de lezer te attenderen.

Ook met andere zaken die de leesbaarheid van een tekst beïnvloeden houdt typografie zich bezig. Bijvoorbeeld het gebruik (doelgroep) en de indeling van een pagina. De typograaf let op:

- De zetbreedte (regellengte): de breedte van een tekstblok of kolom. De typograaf let daarbij op het maximum aantal tekens of woorden per regel. Bij een tekst met te lange regels moet het oog van de lezer namelijk een te grote afstandssprong maken van het eind van de regel naar het begin van de volgende. In het algemeen worden maxima gehanteerd van gemiddeld circa 85 tekens (inclusief spaties en leestekens) of van gemiddeld twaalf woorden.
- De diverse lettergroottes (corpsen) en -soorten. Door een combinatie daarvan (naast o.a. kleurgebruik) kan de typograaf de diverse tekstelementen visueel

[1] gathered from the TEX-distribution

Figure 2: Long letter example with a non-standard logo, page 1

onderscheidend maken en daarmee de inhoudelijke hiërarchie goed visualiseren en ordenen. Letterfamilies bestaan uit diverse lettersoorten, meestal minimaal romein (normaal), vet, cursief en vet-cursief. Er zijn ook uitgebreide letterfamilies, die dan bijvoorbeeld als extra lettersoort vet-cursief, halfvet, extra vet, versmald en verbreed hebben.

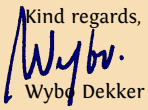
- De interlinie: het wit tussen twee regels.
- De regelafstand: de grootte van de letter (het korps) opgeteld bij de grootte van de interlinie. (Voorbeeld: corps 10 punt + 4 punt interlinie geeft een regelafstand van 14 punt.)
- De woordspaties: het wit (de ruimte) tussen twee woorden.
- De letterspatiëring: het wit tussen de letters onderling
- De leestekens
- De gebruikte letterfamilie(s) (lettertypen).
- Het vaste (verticale) tussenwit (bij meerdere kolommen)
- Het bijeenblijven van inhoudelijke eenheden
- Het bijeenblijven van inhoudelijke eenheden

Om een bekend voorbeeld te geven: de staartregel van een alinea die niet alleen boven aan een pagina mag staan (het zogenaamde 'hoerenjong'). Zo bestaat er onder andere ook de 'wees' of de 'weduwe' (uit het engels: the 'widow'). Deze termen staan beiden voor de eerste regel van een alinea die alleen staat onderaan een pagina.

Voor woordenboeken of kranten,[2] waar ruimte schaars is, worden er opzettelijk smalle lettertypen uitgezocht, waardoor het papier efficiënter benut kan worden. De marges worden dan uiteraard ook klein gehouden. Een voorbeeld is de Lexicon (Bram de Does, 1992), die wordt gebruikt in de krant NRC Handelsblad en het woordenboek de Dikke Van Dale.

Sommige aspecten en gewoontes van de typografie zijn universeel: te lange regels, te weinig interlinie en te kleine woordspaties lezen niet prettig. Andere gewoontes zoals het gebruik van aanhalingstekens en gedachtestreepjes verschillen van tijd tot tijd en van land tot land en daarbinnen nog weer van publicatie tot publicatie.

Kind regards,



Wybo Dekker

**Enclosure:**
Isodoc documentatie

[2] en wat u nog maar zelf kunt bedenken...

Figure 3: Long letter example with a non-standard logo, page 2

# 6 Usage: invoices

## 6.1 A simple invoice

Invoices (can) have the same structure as letters, except that the `\opening` isn't «Dear Somebody» anymore, but something like «Invoice». And the `\closing` doesn't say «Best regards», but may provide payment information. And the body is not a simple text, but a table with descriptions of things to be paid, and the corresponding amounts of money.

An example, as usual, is most instructive:

```
\documentclass{isodoc}
\usepackage{invoice}
\setupdocument{
   ourref = 8234,
     date = 20060401,
  subject = Declaratie verzending aanmaningen,
       to = NTG\\Maasstraat 2\\5836 BB Sambeek
}
\begin{document}
\invoice[payref=123]{
  \itable{
    \iitem{enveloppen}{6,60}
    \iitem{postzegels}{9,00}
    \itotal[Subtotaal]{15,60}
  }
  \\[3ex]\paymentdata
}
\end{document}
```

The invoice style file used here looks like:

```
\NeedsTeXFormat{LaTeX2e}[1999/12/01]
\ProvidesPackage{invoice}
  [2010/08/21 v1.1 example style for isodoc]
\RequirePackage[english,dutch]{babel}

\setupdocument{
  accountname   = W.H.\,Dekker,
  addresscenter = 67,
  areacode      = 31,
  cellphone     = 6\,3033\,3955,
  city          = Deil,
  company       = Wybo Dekker,
  country       = The Netherlands,
  countrycode   = NL,
  email         = wybo@xs4all.nl,
  fold3,
  footer,
  iban          = \scshape nl94rabo0304046221,
  language      = nl-NL,
  opening       = L.S.,
  phone         = 87\,8748496, % phone numbers without leading 0:
  return,
  street        = Deilsedijk 60,
  term          = 14,
  website       = www.xs4all.nl,
  who           = Wybo Dekker,
  zip           = 4158 CH,
}
```

The result is shown in figure 4.

Wybo Dekker

Wybo Dekker
Deilsedijk 60
4158 CH Deil

**Wybo Dekker • Deilsedijk 60 • 4158 CH Deil**

NTG
Maasstraat 2
5836 BB Sambeek

| Uw brief van | Uw kenmerk | Ons kenmerk | Datum |
|---|---|---|---|
| | | 8234 | 1 april 2006 |

Onderwerp: Declaratie verzending aanmaningen

REKENING

| Omschrijving | Bedrag (€) |
|---|---|
| enveloppen | 6,60 |
| postzegels | 9,00 |
| Subtotaal | **15,60** |

**Betaalgegevens:**

| | |
|---|---|
| betalingstermijn: | 14 dagen |
| IBAN: | NL94RABO0304046221 |
| ten name van: | W.H. Dekker |
| kenmerk: | 123 |

| webstek | telefoon | mobiel | e-mail |
|---|---|---|---|
| www.xs4all.nl | 087 8748496 | 06 3033 3955 | wybo@xs4all.nl |

Figure 4: Invoice example

### 6.2 Invoice with redefined logo

When the `accept` option is used, the invoice will be created with an invoice form on the lower third part of the page. Here is an example:

```
\documentclass{isodoc}
\usepackage{accept}
\setupdocument{accept,
  acceptdesc=NTG\\2006,
  acceptdescription=Contributie 2006,
  acceptreference=4000 0000 2006 0308,
  date=20060503,
  subject=Contributie 2006,
  nofooter
}
\begin{document}
\invoice[
  to=W.H. Dekker\\Deilsedijk 60\\4158 CH Deil,
  acceptaccount=304046221,
  accepteuros=40,
  acceptcents=00,
  ourref=308,
]{\itable{\iitem{Contributie NTG voor 2006}{40,00}}\\[3ex]
  \paymentdata
}
\end{document}
```

Normally such invoices are printed on preprinted paper with an easily detachable, perforated form. In this example, the form itself has been printed, too. The `graphicx` and `textpos` packages have already been made available by the `isodoc` class. Figure 5 shows the output of this example.

## 7 Example files

isodoc comes with several examples. Each example has a source file, a style file, and some image files. The files can be generated from `isodoc.dtx` by running `luatex isodoc.ins`. After that, they can all be compiled, together with the isodoc documentation, by running `make`. If you want to experiment with the examples by changing them, then compile them individually with `make <example>.pdf`, because with just `make` the isodoc documentation will be recompiled, as the examples are part of it.

NEDERLANDSTALIGE TEX GEBRUIKERSGROEP

Wybo Dekker
Deilsedijk 60
4158 CH Deil

NTG • Deilsedijk 60 • Deil 4158 CH

W.H. Dekker
Deilsedijk 60
4158 CH Deil

| Uw brief van | Uw kenmerk | Ons kenmerk | Datum |
|---|---|---|---|
| | | 308 | 3 mei 2006 |

Onderwerp: Contributie 2006

REKENING

| Omschrijving | Bedrag (€) |
|---|---|
| Contributie NTG voor 2006 | 40,00 |

**Betaalgegevens:**

betalingstermijn: 30 dagen
IBAN: nl53ingb0001306238
ten name van: NTG
kenmerk: 308

deze **strook** niet meezenden

Contributie 2006

**euro-acceptgiro**

4000 0000
2006 0308

over te schrijven/te storten

€ 40 euro 00 ct 4000 0000 2006 0308 +

euro 40 ct 00

van girorekening of bankrekening 304046221

van/door

NTG
2006

naam W.H. Dekker
adres Deilsedijk 60
plaats 4158 CH Deil

handtekening

zijn alle rode rubrieken ingevuld?

formulier uitsluitend bestemd voor betaling in euro's

110575-E05
D002

op rekening 1306238
NTG
Deilsedijk 60
4158 CH Deil

op rekening 1306238
van NTG
Deilsedijk 60, 4158 CH Deil

formulier met blauwe of zwarte inkt invullen

© gezamenlijke banken en postbank

nadruk verboden — de ruimte hieronder niet beschrijven — niet vouwen

betalingskenmerk | X van rekening | euro ct X | diversen | X naar rekening | code

0021306238+ 12>

Figure 5: Invoice example with accept form

# 8 Implementation

The basis is the `article` class with all options:

```
⟨*class⟩
\ifx\pdfoutput\undefined\else%
  \ifnum\pdfoutput=1\else%
    \ClassError{isodoc}{Compile me with pdflatex, lualatex or xelatex!}{}
  \fi
\fi
\DeclareOption*{\PassOptionsToClass{\CurrentOption}{memoir}}
\ProcessOptions
\LoadClass{memoir}
```

We use `\ctable` floats here, and we need `ctable`'s commands for decent spacing in tables and more. `ctable` also brings us `array`, `tabularx`, `color`, and `xkeyval`. `eurosym` is used for the euro symbol.

```
\RequirePackage{xcolor,tabularx,graphicx,xstring,calc}
\RequirePackage{forarray,longtable}
```

Since the name of the package contains 'iso', make the page A4. For textpos, divide the page in 210 columns of 1mm each and 297 rows, 1mm each. The page is vertically divided in 6 columns of 35mm each: a left margin, 4 fields, and a right margin.

```
\setstocksize{297mm}{210mm}
\settrimmedsize{\stockheight}{\stockwidth}{*}
\settypeblocksize{237mm}{140mm}{*}
\setlrmargins{*}{*}{1}
\setulmargins{35mm}{*}{*}
\setheadfoot{\baselineskip}{\baselineskip}
\checkandfixthelayout
\RequirePackage[absolute,overlay]{textpos}
\TPGrid{210}{297}
```

Several colors can be changed, by using the `\definecolor` command; the defaults (all black) are set here:

`headcolor` `headcolor:` color for the header and footer field texts

`headingcolor` `headingcolor:` color for the fancy headings

`markercolor` `markercolor:` color for the folding marks

```
\definecolor{headcolor}{gray}{0}
\definecolor{headingcolor}{gray}{0}
\definecolor{markercolor}{gray}{0}
```

Use fancy headings, except for the first page. The heading, on a rule, looks like:

To: John Doe (April 1st, 2006) Page 2 of 3

```
\RequirePackage{fancyhdr}
\pagestyle{fancy}
\AtBeginDocument{\addtolength{\headheight}{\baselineskip}}
```

Background color for signaling items that should have been defined, but weren't:

```
\definecolor{isodocpink}{rgb}{1,.7,.7}
\def\Undefined#1{\fboxsep1pt\colorbox{isodocpink}{\strut Undefined #1}}
```

`headfont` A small sans serif font is used for header and footer field names and the sender's address information. The idea is that this is used for all pre-printed text on the letter paper.

```
\def\headfont{\footnotesize\sffamily\color{headcolor}}
```

## 8.1 The options and their defaults

### 8.1.1 General options

shift

The default shift is 0mm,0mm. The `shift` option moves the output to the right and down:

```
\def\@xyshift#1,#2@@@{\def\@xshift{#1}\def\@yshift{#2}}
\define@key{isodoc}{shift}{%
  \@xyshift#1@@@
  \AtBeginDocument{\textblockorigin{\@xshift mm}{\@yshift mm}}
}
```

vertical
novertical

The `vertical` option prints a vertical bar in invoices between description and amount – (this is the default), the `novertical` option suppresses it.

```
\define@key{isodoc}{vertical}[\verticaltrue]{\verticaltrue}
\define@key{isodoc}{novertical}[\verticaltrue]{\verticalfalse}
                                                \newif\ifvertical\verticaltrue
```

foreign

Several items in the letter/invoice will be different in documents that are to be sent abroad; this is set with the `foreign` option, false by default:

```
\define@key{isodoc}{foreign}[\foreigntrue]{\foreigntrue}
                                                \newif\ifforeign\foreignfalse
```

cityzip

By default, the zip code is typeset before the city. The `cityzip` option reverses this:

```
\define@key{isodoc}{cityzip}[\cityziptrue]{\cityziptrue}
                                                \newif\ifcityzip\cityzipfalse
```

language

Set the language; en-GB, set at the `\EndOfClass` is the default.

```
\define@key{isodoc}{language}{
  \StrSubstitute{#1}{-}{}[\@iso]\csname isodoc@\@iso\endcsname}
```

ordinalss

Ordinal suffixes (like st, nd, rd, th) in dates are put on the line by default, but they can be set superscript with the `ordinalss` option:

```
\define@key{isodoc}{ordinalss}[\@isodocordinalsstrue]{%
 \ifx\yourlettertext\undefined%
   \@isodocordinalsstrue
 \else
   \ClassError{isodoc}{
     You must use the ordinalss option before any language option}
 \fi}
 \newif\if@isodocordinalss\@isodocordinalssfalse
```

fill
nofill

The default is to have left, but not right justification, allowing for hyphenation in extreme cases:

```
\define@key{isodoc}{fill}  []{\rightskip=1\rightskip}
\define@key{isodoc}{nofill}[]{\rightskip=0mm plus 35mm}
                                \rightskip=0mm plus 35mm
```

### 8.1.2 Logo

company
logoaddress
who
street
city
zip
country
countrycode

The logo, by default, consists of a large company or personal name on top a rule, with a contact person's name (probably your own name) and address hanging under the rule. Its contents are defined by the following options:

```
\define@key{isodoc}{logo}[\@isodoclogotrue]{\@isodoclogotrue}
\define@key{isodoc}{nologo}[\@isodoclogofalse]{\@isodoclogofalse}
                                  \newif\if@isodoclogo\@isodoclogotrue
\define@key{isodoc}{company}    {\def\company{#1}}
                                   \def\company{\Undefined{company}}
\define@key{isodoc}{logoaddress}{\def\logoaddress{#1}}
 \def\logoaddress{}
\define@key{isodoc}{who}        {\def\who{#1}}
                                   \def\who{\Undefined{who}}
\define@key{isodoc}{street}     {\def\street{#1}}
                                   \def\street{\Undefined{street}}
```

```
\define@key{isodoc}{city}       {\def\city{#1}}
                                 \def\city{\Undefined{city}}
\define@key{isodoc}{country}    {\def\country{#1}}
                                 \def\country{\Undefined{country}}
\define@key{isodoc}{countrycode}{\def\countrycode{#1}}
                                 \def\countrycode{\Undefined{countrycode}}
\define@key{isodoc}{zip}        {\def\zip{#1}}
                                 \def\zip{\Undefined{zip}}
\def\prezip{\ifforeign\countrycode-\else\fi}
```

### 8.1.3 Address window

leftaddress
rightaddress
addresscenter
addresswidth

The address can be positioned vertically with the `addresscenter` option; the default is 63.5mm. This is the vertical position of the center of the address. Horizontally, the address is positioned either left or right, depending on the `leftaddress` or `rightaddress` options being used. In the first case, the address start at x=35mm, which is the left margin (the default), and thus in line with the first header field, in the second case at 105mm, in line with the one-but-last header field.

```
\define@key{isodoc}{leftaddress} []{\def\xaddress{35}}
                                   \def\xaddress{35}
\define@key{isodoc}{rightaddress}[]{\def\xaddress{105}}
\define@key{isodoc}{addresscenter} {\def\@addresscenter{#1}}
                                   \def\@addresscenter{63.5}
\define@key{isodoc}{addresswidth}  {\def\@addresswidth{#1}}
                                   \def\@addresswidth{70}
```

to

The `to` option takes the addressee's address lines. Use `\\` to separate lines. The info will be split by `\processto` on the first `\\` separator into the addressee's name (`\toname`) and his address (`\toaddress`) The `\toname` will be reported in the pdf's document properties. However, this works only if the `to` key is set, with `\setupdocument`, in the preamble. If several letters are composed, `to` is normally set in the `\letter` or `\invoice` commands and thus is not seen by the `\hypersetup`, which is called `\AtBeginDocument`; so set the defaults to `Various people` for the `\toname` and make the address undefined:

```
\define@key{isodoc}{to}{\processto{#1}}\def\toname{Various people}
                                       \def\toaddress{\Undefined{to}}
\long\def\processto#1{\xproc #1\\@@@\ifx\toaddress\empty
    \else \yproc #1@@@\fi}
\long\def\xproc #1\\#2@@@{\gdef\toname{#1}\gdef\toaddress{#2}}
\long\def\yproc #1\\#2@@@{\gdef\toaddress{#2}}
```

return
noreturn
returnaddress

The default is to have no return address; but this can be changed by using the `return` (either in the style file or in the source) or, if the default was changed in the style file, remove it with `noreturn` in the source. Company and country names are often too long to fit in the address window. Or you may want to define an entirely different return address. The `returnaddress` option is provided to redefine the return address:

```
\define@key{isodoc}{return}     []{\returntrue}
                     \newif\ifreturn\returnfalse
\define@key{isodoc}{noreturn}   []{\returnfalse}
\define@key{isodoc}{returnaddress}{\def\returnaddress{#1}}
```

### 8.1.4 Header

header
noheader

A header is switched on or off with the `header` and `noheader` options. The default is to have a header.

```
\define@key{isodoc}{header}  []{\headertrue}
                  \newif\ifheader\headertrue
\define@key{isodoc}{noheader}[]{\headerfalse}
```

bodyshift

The header is the start of the body. It is initially positioned at 98mm from the top of the paper, but it can be shifted with the `bodyshift` option.

```
\define@key{isodoc}{bodyshift} {\advance\headerpos#1}
\newcount\headerpos\headerpos=98
\newcount\footerpos\footerpos=275
\newcount\subjectpos
\newcount\openingpos
\newcount\textskip
```

The `\paymentdata` command prints a tabular with payment data, as far as they are not empty. The selection and order of those data are defined with the footorder option; the default is to print all non-empty values.

```
\define@key{isodoc}{paymentorder} {\def\isodoc@paymentorder{#1}}
\def\isodoc@paymentorder{term;bankname;bic;routingno;iban;accountno;%
accountname;payref;vatno;chamber}
```

### 8.1.5 Footer

footer
nofooter

A footer is switched on or off with the `footer` and `nofooter` options. The default is the have no footer.

```
\define@key{isodoc}{footorder} {\def\isodoc@footorder{#1}}
                               \def\isodoc@footorder{website;phone;cellphone;email}
\define@key{isodoc}{footer}  []{\footertrue}
                  \newif\iffooter\footerfalse
\define@key{isodoc}{nofooter}[]{\footerfalse}
```

areacode
phone
phoneprefix
cellphone
fax
website
email
creditorid

If there *is* a page footer, only those fields will be displayed which are not empty. Currently the `phone`, `cellphone`, `fax`, `email`, `website` and `creditorid` are recognized as possible footer fields. Phone and fax number will be prefixed with a 0, unless the `foreign` option was used: then the prefix will be +nn\,, where nn is the area code. The latter is set with the `areacode` option, which is «Undefined area code» by default.

```
\define@key{isodoc}{areacode}   {\def\areacode{#1}}
                                 \def\areacode{\Undefined{areacode}}
\define@key{isodoc}{phoneprefix}{\def\phoneprefix{#1}}
                                 \def\phoneprefix{0}
\define@key{isodoc}{phone}      {\def\phone{#1}}
                                 \def\phone{}
                                 \def\@phone{\Undefined{phone}}
\define@key{isodoc}{cellphone}  {\def\cellphone{#1}}
                                 \def\cellphone{}
                                 \def\@cellphone{\Undefined{cellphone}}
\define@key{isodoc}{fax}        {\def\fax{#1}}
                                 \def\fax{}
                                 \def\@fax{\Undefined{fax}}
\define@key{isodoc}{website}    {\def\website{#1}}
                                 \def\website{}
                                 \def\@website{\Undefined{website}}
\define@key{isodoc}{email}      {\def\email{#1}}
                                 \def\email{}
                                 \def\@email{\Undefined{email}}
\define@key{isodoc}{creditorid} {\def\creditorid{#1}}
                                 \def\creditorid{}
                                 \def\@creditorid{\Undefined{creditorid}}
```

### 8.1.6 Folding mark

nofold

The default is to have no folding mark. So start with the folding mark position outside the paper boundaries:

```
\define@key{isodoc}{nofold}[]{\yfold=-1mm}
               \newdimen\yfold\yfold=-1mm
```

foldleft
foldright

The folding mark is in the right margin, but it can be moved to the left margin with the

foldleft option, or, if made that the default in your style file, back to the right margin with the foldright option:

```
\define@key{isodoc}{foldleft}[]{\xfold=9mm}
                \newdimen\xfold\xfold=201mm
\define@key{isodoc}{foldright}[]{\xfold=201mm}
```

fold2 The envelope for double folded A4 is C5: 162x220mm, window 40x110mm, upper left corner at 20x50mm. Fold the A4 to have a tolerance of 2mm at top and bottom, by putting the fold mark at 162-4=158 mm.

```
\define@key{isodoc}{fold2}[]{\yfold=158mm}
```

fold3 The envelope for triple folded A4 is DL: 110x220mm, Fold the A4 to have a tolerance of 1.5mm at top and bottom, by putting the fold mark at 110-3=107mm.

```
\define@key{isodoc}{fold3}[]{\yfold=107mm}
```

fold For non-standard envelopes and paper formats the position of the folding mark can be set at any position (in mm) from the top of the paper:

```
\define@key{isodoc}{fold}{\yfold=#1mm}
```

### 8.1.7 Header fields

There are four header fields, each one quarter of the \textwidth wide. Under those, if the subject has been defined, a subject line. The header position is 98mm by default, but it can be shifted with the bodyshift option.

ourref
yourref
yourletter

```
\define@key{isodoc}{ourref}  {\def\ourref{#1}}
                              \def\ourref{}
\define@key{isodoc}{yourref}   {\def\yourref{#1}}
                              \def\yourref{}
\define@key{isodoc}{yourletter}{\def\yourletter{#1}}
                              \def\yourletter{}
```

date The date must be entered in either of three formats: yyyy-mm-dd, yyyymmdd or the string today (*not* \today!). Here we check that a correct format is offered and that the values for mm and dd are in the range 1–12 and 1–31 respectively. The string today sets the date to today's date.

```
\define@key{isodoc}{date}{\@isomakedate{#1}}
```

forcedate If you know what you do you can substitute anything you like for the date by using the forcedate option instead of date:

```
\define@key{isodoc}{forcedate}{\def\@forcedate{#1}}\def\@forcedate{}
```

subject The subject is empty by default and will be typeset only if you give it a value.

```
\define@key{isodoc}{subject}{\def\subject{#1}}
                            \def\subject{}
```

opening
openingcomma

The opening, something like «Dear Reader», is set by the opening option; the default is «Undefined opening». It is followed by a comma, unless the openingcomma has been used to set it to a different character, like a semicolon or an exclamation mark.

```
\define@key{isodoc}{opening}     {\def\opening{#1}}
                                  \def\opening{\Undefined{opening}}
\define@key{isodoc}{openingcomma}{\def\@openingcomma{#1}}
                                  \def\@openingcomma{,}
```

### 8.1.8 Closing, autograph, signature

closing The closing, something like «Best regards», is set by the closing option; the default is «Undefined closing». It will be separated from the text with whitespace, which can be changed, preferably in a style file, with the closingskip length, which is 2\baselineskip by default.

```
\define@key{isodoc}{closing}     {\def\closing{#1}}
                                  \def\closing{\Undefined{closing}}
```

```
\define@key{isodoc}{closingcomma}{\def\@closingcomma{#1}}
                                  \def\@closingcomma{,}
\define@key{isodoc}{closingskip}{\ClassError{isodoc}{
  The closingskip option has been removed
  in version 1.04; instead set the signatureskip length,
  preferably in a style file}}
```

Some skips/booleans defined here to make it easier to redefine them in a style file. They precede the closing, copyto and enclosers and have no corresponding options (yet).

```
            \newdimen\closingskip\closingskip=\baselineskip
            \newdimen\signatureskip\signatureskip=2\baselineskip
            \newdimen\copytoskip\copytoskip=\baselineskip
            \newdimen\enclosureskip\enclosureskip=\baselineskip
            \newif\ifencldown\encldownfalse
```

autograph The autograph is either just a newline, or a vertical spacing where you can put your autograph manually, or a graphic. In the latter case, is must have been defined with the macro `\autograph`, which defines an autograph from an image, see the section *User Macros*. Not using the `autograph` option is equivalent to `autograph=0` (just a newline). Using it without a value is equivalent to `autograph=2` (image inserted):

```
\define@key{isodoc}{autograph}[2]{\def\autographversion{#1}}
                                  \def\autographversion{0}
```

signature The signature, something like «John Letterwriter», is set by the `signature` option; the default is «Undefined signature».

```
\define@key{isodoc}{signature}{\def\signature{#1}}
                               \def\signature{\Undefined{signature}}
```

enclosures Enclosures are set by the `enclosures` option. There are none by default.

```
\define@key{isodoc}{enclosures} {\def\enclosures{#1}}
                                 \def\enclosures{}
```

copyto Cc-ed names are set by the `copyto` option. There are none by default.

```
\define@key{isodoc}{copyto} {\def\copyto{#1}}
                            \def\copyto{}
```

### 8.1.9 Invoice specific data

term
bankname
bic
routingno
iban
accountno
accountname
vatno
chamber
currency

Invoices need to state some specific data, like account data and term of payment:

```
\define@key{isodoc}{term}[30]{\def\term{#1 \daystext}}
                               \def\term{}
\define@key{isodoc}{accountno}  {\def\accountno{#1}}
                                 \def\accountno{}
\define@key{isodoc}{mandateid}  {\def\mandateid{#1}}
                                 \def\mandateid{}
\define@key{isodoc}{routingno}  {\def\routingno{#1}}
                                 \def\routingno{}
\define@key{isodoc}{bankname}   {\def\bankname{#1}}
                                 \def\bankname{}
\define@key{isodoc}{accountname}{\def\accountname{#1}}
                                 \def\accountname{}
\define@key{isodoc}{iban}       {\def\iban{#1}}
                                 \def\iban{}
\define@key{isodoc}{bic}        {\def\bic{#1}}
                                 \def\bic{}
\define@key{isodoc}{payref}     {\def\payref{#1}}
                                 \def\payref{}
\define@key{isodoc}{vatno}      {\def\vatno{#1}}
                                 \def\vatno{}
\define@key{isodoc}{chamber}    {\def\chamber{#1}}
                                 \def\chamber{}
\define@key{isodoc}{currency}   {\def\currency{#1}}
                                 \def\currency{\EuroSymbol}
```

accept
acceptaccount
acceptaddress
acceptcents
acceptdescription
acceptdesc
accepteuros
acceptreference

If an accept form is to be printed, here are the options to fill in all the fields:

```
\define@key{isodoc}{accept}[E05]{\def\accepttype{#1}
                                 \newfont\ocrb{ocrb10}
                                }
\define@key{isodoc}{acceptaccount}    {\def\acceptaccount{#1}}
                                       \def\acceptaccount{}
\define@key{isodoc}{acceptaddress}    {\def\acceptaddress{#1}}
                                       \def\acceptaddress{}
\define@key{isodoc}{acceptcents}      {\def\acceptcents{#1}}
                                       \def\acceptcents{\Undefined{}}
\define@key{isodoc}{acceptdescription}{\def\acceptdescription{#1}}
                                       \def\acceptdescription{}
\define@key{isodoc}{acceptdesc}       {\def\acceptdesc{#1}}
                                       \def\acceptdesc{}
\define@key{isodoc}{accepteuros}      {\def\accepteuros{#1}}
                                       \def\accepteuros{\Undefined{}}
\define@key{isodoc}{acceptreference}  {\def\acceptreference{#1}}
                                       \def\acceptreference{\Undefined{ref}}
```

For now, we define field positions for the E05 accept form only; when data for other forms become available, the content of `\accepttype` will have to be checked. Here is a rough layout of the E05 accept form – the last character tells if the items are typeset in left-aligned (L) or centered (C) boxes:

```
                                        description       L
ref                                     description       L
ref                 euros cents              reference    C

eur ct                  account                           C

desc                address                               L
desc                address
desc                address
```

```
\def\wacceptaccount{65}      \def\wacceptdesc{26}
\def\xacceptaccount{75}      \def\xacceptdesc{7}
\def\yacceptaccount{231.5}   \def\yacceptdesc{241}
%
\def\wacceptaddress{90}      \def\waccepteuros{32}
\def\xacceptaddress{58}      \def\xaccepteuros{60}
\def\yacceptaddress{241}     \def\yaccepteuros{219}
%
\def\wacceptcents{13}        \def\waccepteur{21}
\def\xacceptcents{89}        \def\xaccepteur{14.4}
\def\yacceptcents{219}       \def\yaccepteur{231.5}
%
\def\wacceptct{9}            \def\wacceptreference{55}
\def\xacceptct{32}           \def\xacceptreference{125}
\def\yacceptct{231.5}        \def\yacceptreference{219}
%
\def\wacceptdescription{100} \def\wacceptref{30}
\def\xacceptdescription{105} \def\xacceptref{7}
\def\yacceptdescription{200} \def\yacceptref{212}
```

This is the `\baselineskip` for the two-line reference of the detachable strip:

```
\newdimen\acceptreferenceskip\acceptreferenceskip=5.15mm
```

## 8.2 User Macros

Some symbols taken from marvosym.sty:

```
\newcommand{\@isodocsym}{%
  \fontfamily{mvs}\fontencoding{U}%
  \fontseries{m}\fontshape{n}\selectfont
}
\def\EuroSymbol   {{\@isodocsym\char164}}
\def\EUROSymbol   {{\@isodocsym\char99 }}
\def\LetterSymbol {{\@isodocsym\char66 }}
\def\EmailSymbol  {{\@isodocsym\char107}}
\def\PhoneSymbol  {{\@isodocsym\char84 }}
\def\MobileSymbol {{\@isodocsym\char72 }}
\let\EUR\EuroSymbol
```

The autograph is either just a newline, or a vertical spacing where you can put your autograph manually, or a graphic. In the latter case, is must have been defined with the macro `\autograph`, which defines an autograph from an image.[10]
Arguments (positions and outdents are taken as integer percentages of the image height, from the top of the image):

arg 1: 2,3,...9: autograph number; will be translated internally to define `\autographA`, `\autographB`... `\autographH`
2: height of the image
3: closing baseline position
4: signature baseline position
5: outdent in the margin
6: the image (jpg, png, pdf...)

`\autograph`

```
\newdimen\iso@outdent
\newdimen\iso@signpos
\newdimen\iso@down
\newdimen\iso@closingpos
```

The arguments 3-5 of autograph have changed from dimens in versions up to 0.11 to integer numbers in version 1.00 and later. The `iso@isNum` macro will prevent the appearance of incomprehensible error message by issuing a class error if one of the arguments is not a number.

```
\def\iso@isNum#1#2{%
  \sbox\z@{\@tempcnta=0#1\relax}
  \ifdim\wd0>\z@\relax\ClassError{isodoc}%
    {Argument #2 of autograph must be a number!}%
    {You are probably using the oldstyle autograph arguments}\fi
}
\def\autograph#1#2#3#4#5#6{%
  \iso@isNum{#3}{3}\iso@isNum{#4}{4}\iso@isNum{#5}{5}
  \ifnum #1<2
    \ClassError{isodoc}
    {autograph #1 cannot be changed (first arg must be 2..9)}{}
  \fi
  \ifnum #1>9
    \ClassError{isodoc}
    {autograph #1 cannot be changed (first arg must be 2..9)}{}
  \fi
  \bgroup
  \lccode`2=`A \lccode`6=`E
  \lccode`3=`B \lccode`7=`F
  \lccode`4=`C \lccode`8=`G
  \lccode`5=`D \lccode`9=`H
  \lowercase{\def\temp{#1}}%
```

[10] Thanks, Hans Hagen and Piet van Oostrum, for its definition

```
  \expandafter\egroup\expandafter\def\csname autograph\temp\endcsname{%
    \vskip-2\baselineskip%
    \setlength{\iso@down}{#2*#3/100-#2-2\baselineskip}
    \setlength{\iso@outdent}{-#2*#5/100}
    \setlength{\iso@signpos}{#2*(#4-#3)/100}
    \hspace*{\iso@outdent}%
       \raisebox{\iso@down}[0pt][0pt]{\includegraphics[height=#2]{#6}}%
    \\[\baselineskip]%
    \ifx\closing\empty\else
       \closing\@closingcomma\\[\iso@signpos]\\[-2\baselineskip]
    \fi%
    \signature%
  }
}
```

### 8.2.1 Logo

\logo

The logo, by default, consists of a large company name on top a rule, with a contact person's name (probably your own name) and address hanging under the rule.

```
\newcommand{\zippedcity}{%
  \ifcityzip\city\ \prezip\zip\else
  \prezip\zip\ \city\fi
}
\newcommand{\logo}{\if@isodoclogo%
  { \parskip=0pt\parindent=0pt
    \begin{textblock}{140}[0,1](35,20)%
        \textsf{\LARGE\company}\\[-1.7ex] % large company name
        \rule{\hsize}{.3pt}               % on top a rule
    \end{textblock}
  }
  \isodoc@Tbox{140}{22}{35}{\noindent
     \footnotesize\sffamily
     \ifx\empty\logoaddress%
       \ifx\who\empty\else\who\\\fi
       \ifx\street\empty\else\street\\\fi
       \zippedcity
       \ifforeign\\\country\fi
     \else\logoaddress\fi
  }\fi
}
```

\returnaddress

```
\def\returnaddress{%
  \company\\
  \street\\
  \zippedcity
  \ifforeign\\\country\fi
}
```

\setupdocument

```
\newcommand{\setupdocument}[1]{
  \setkeys{isodoc}{#1}
}
```

\@isomakedate

isomakedate sets the \year, \month and \day counters for \@iso@date. The argument can have one of three forms:

1. yyyymmdd
2. yyyy-mm-dd
3. today that is: the string "today" (*not* \today!)

The resulting \date format depends on the language option, that is: the month is in that language, and the formatting is according to the usage in the language. The value for dd may be 00; in that case the day will not be reported. Some examples, assuming language=en-GB:

2013-01-01 1st January 2013
2013-01-00January 2013
20130101 1st January 2013
20130100 January 2013
today 3rd June 2013 assuming that's today's date

```
\newcount\@isoyear   \@isoyear=\year  \year=0
\newcount\@isomonth \@isomonth=\month
\newcount\@isoday     \@isoday=\day
\def\@isomakedate#1{
  \StrSubstitute[2]{#1}{-}{}[\@iso@arg]
  \IfStrEq{\@iso@arg}{today}{
     \year=\@isoyear
    \month=\@isomonth
      \day=\@isoday
  }{\IfInteger{\@iso@arg}{}{\ClassError{isodoc}{
        Illegal date: not yyyymmdd | yyyy-mm-dd | today}{}\fi}
    \StrLeft{\@iso@arg}{4}[\@iso]\year=\@iso
    \StrRight{\@iso@arg}{2}[\@iso]\day=\@iso
    \StrMid{\@iso@arg}{5}{6}[\@iso]\month=\@iso
  }
  \ifnum\month > 12 \ClassError{isodoc}{Illegal date: month>12}{}\fi
  \ifnum\day   > 31 \ClassError{isodoc}{Illegal date: day>31}{}\fi
}
```

`\date` `\date` displays the date. Its value is that of `forcedate` if that option was used; otherwise it is undefined, unless the `date` option was used.

```
\def\date{%
  \ifx\@forcedate\empty%
    \ifnum\year=0\Undefined{date}\else\@isodate\fi
  \else\@forcedate\fi
}
```

`\paymentdata` Print a table with payment information. Shows all on-empty data. However, if the value of `\payref` is empty, it will be replaced with `\ourref` (used in the header fields, may also be empty.) First collect (see here) non-empty data in a tabular body, then use that in the tabular:

```
\newcommand{\isodoc@paymentbody}{%
  \gdef\isodoc@body{}%
  \ForEachX{;}{%
    \setbox0=\hbox{\csname\thislevelitem\endcsname}%
    \ifdim\wd0=0pt\else%
      \protected@xdef\isodoc@body{%
        \isodoc@body
        \csname\thislevelitem text\endcsname: &
        \csname\thislevelitem\endcsname \protect\\
      }%
    \fi%
  }{\isodoc@paymentorder}
  \isodoc@body%
}
\def\paymentdata{
  \textbf{\paymentdatatext:}\\
  \begin{tabular}{@{}rl@{}}
    \isodoc@paymentbody
  \end{tabular}
}
```

`paymentdata` was earlier called `accountdata`; now obsolete:

```
\newcommand{\accountdata}{%
  \ClassWarning{isodoc}{%
     Instead of the obsolete command \protect\accountdata,
     please use \protect\paymentdata.
```

```
  }%
  \paymentdata
}
```

The \showkeys command is useful for debugging. It prints a table showing the current values of most keys.

\showkeys

```
\def\@isodocmp#1{
  \begin{minipage}[t]{\hsize}
    \mbox{}
    #1\\[-1.8ex]
    \mbox{}
  \end{minipage}
}
\def\showkeys{%
  \begin{longtable}{rl}
       acceptaccount & \acceptaccount\\
       acceptaddress & \acceptaddress\\
         acceptcents & \acceptcents\\
          acceptdesc & \@isodocmp{\acceptdesc}\\
   acceptdescription & \acceptdescription\\
         accepteuros & \accepteuros\\
     acceptreference & \acceptreference\\
         accountname & \accountname\\
           accountno & \accountno\\
            areacode & \areacode\\
            bankname & \bankname\\
                 bic & \bic\\
           cellphone & \cellphone\\
             chamber & \chamber\\
                city & \city\\
             closing & \closing\\
             company & \company\\
              copyto & \@isodocmp{\copyto}\\
             country & \country\\
         countrycode & \countrycode\\
            currency & \currency\\
               email & \email\\
          enclosures & \@isodocmp{\enclosures}\\
                 fax & \fax\\
                iban & \iban\\
         logoaddress & \logoaddress\\
             opening & \opening\\
              ourref & \ourref\\
              payref & \payref\\
               phone & \phone\\
         phoneprefix & \phoneprefix\\
       returnaddress & \@isodocmp{\returnaddress}\\
           routingno & \routingno\\
           signature & \@isodocmp{\signature}\\
              street & \street\\
             subject & \subject\\
                term & \term\\
              vatno & \vatno\\
             website & \website\\
                 who & \who\\
          yourletter & \yourletter\\
              yourref & \yourref\\
                 zip & \zip\\
  \end{longtable}
}
```

hyperref is needed in all docs for the pdfinfo settings

```
\AtEndOfClass{%
  \RequirePackage{hyperref}
  \RequirePackage{memhfixc}
}
```

`@isodocheadXX` We define the heading parts here in order to allow for easy adaptations in style files.

```
\def\@isodocheadL{\totext:{} \toname{} (\date)}
\def\@isodocheadC{}
\def\@isodocheadR{\pagetext\ \thepage\ \oftext{}
    \begin{NoHyper}\pageref{LastPageOf\thelettercount}\end{NoHyper}
}
\def\@isodocheadbox#1{\mbox{\color{headingcolor}#1}}
```

`@isodocfootXX` We define the footing parts here in order to allow for easy adaptations in style files. Note that, if you redefine any of these, you will probably have to create some footer space with `\geometry{foot}`.

```
\def\@isodocfootL{}
\def\@isodocfootC{}
\def\@isodocfootR{}
```

`\itable` `\itable` inserts an invoice table; arg1 should be the rows of the table.

```
\def\isodoc@bara{\raisebox{-1ex}{\rule{0pt}{3ex}}}
\def\isodoc@barb{\rule{0pt}{2.7ex}}
\def\isodoc@barc{\rule{0pt}{1ex}}
\def\itable#1{\arrayrulewidth0.05em%
  \ifvertical
    \begin{tabularx}{\hsize}{@{}X|r@{}}%
      \sffamily\descriptiontext &
      \sffamily \amounttext\,(\currency)\isodoc@bara\\\hline\\[-5.4ex]
      \isodoc@barb #1%
    \end{tabularx}
  \else
    \begin{tabularx}{\hsize}{@{}Xr@{}}%
      \sffamily\descriptiontext &
      \sffamily \amounttext\,(\currency)\isodoc@bara\\\hline\\[-5.6ex]
      \isodoc@barb #1%
    \end{tabularx}
  \fi
}
```

`\iitem` `\iitem` inserts an invoice item in the `\itable`. It inserts `\\arg1 & % arg2`:

```
\def\iitem#1#2{\\#1&#2\ignorespaces}
```

`\itotal` `\itotal` inserts an invoice total in the `\itable`.
The optional argument replaces `\totaltext`.

```
\newcommand{\itotal}[2][\totaltext]{%
  \isodoc@barc\\\cline{2-2}#1&\textbf{#2}\isodoc@barb
}
```

The counter `\lettercount` is used to construct a label on the last page of each letter/invoice of this document; it will be set to `LastPageOf`*n*, where *n* is the letter number: 1, 2, 3, … This allows for page headings saying "Page n of m." This label is automatically added at the end of each letter.

```
\newcounter{lettercount}\setcounter{lettercount}{0}
```

`\invoice` `\invoice` prints an invoice. The first argument is optional, and may contain the same `key=value` statement as `\setupdocument`. This is useful if the document contains more than one invoice for different addressees.

The second argument creates a two-column table with headings «Description» and «Amount (€)». The two columns are separated with a vertical rule; its construction is somewhat complicated, as the booktabs/ctable packages are in use that don't provide decent vertical separators. The `\barsep` macro extends these separators vertically.

```
\newif\ifclosing\closingtrue
```

```
\newcount\footcount
\newcommand{\invoice}[2][]{%
  \closingfalse
  \ifx\payref\empty\def\payref{\ourref}\fi
  \letter[#1,
    opening={\scshape\Large\invoicetext},
    openingcomma={},
    closing={},
    signature={}]{\isodoc@Tbox{35}{127}{140}{\ignorespaces#2}}
}
```

\letter `\letter` prints a letter... The code is enclosed in an extra pair of braces, in order to keep option changes local

```
\newcommand{\letter}[2][]{{%
  \clearpage{\pagestyle{empty}\cleardoublepage}
  \setcounter{section}{0}
  \setkeys{isodoc}{#1}
  \def\isodoc@lead{\ifforeign+\areacode\,\else\phoneprefix\fi}
  \ifx\phone     \empty\else\def\@phone     {\isodoc@lead\phone}    \fi
  \ifx\cellphone \empty\else\def\@cellphone {\isodoc@lead\cellphone}\fi
  \ifx\fax       \empty\else\def\@fax       {\isodoc@lead\fax}      \fi
  \ifx\website   \empty\else\def\@website   {\website}              \fi
  \ifx\email     \empty\else\def\@email     {\email}                \fi
  \ifx\creditorid\empty\else\def\@creditorid{\creditorid}           \fi
```

By now, a language should have been chosen; if not, issue a warning and set the language to the default: -en-GB

```
  \ifx\yourlettertext\undefined%
    \ClassWarning{isodoc}{
      You did not use the language option; using the default: en-GB}
    \isodoc@enGB%
  \fi
  \ifnum\value{lettercount}=0%
    \hypersetup{pdftitle={letter to \toname\ dated \today},
                pdfsubject={\subject},
                pdfauthor={\who},
                pdfcreator={LaTeX with isodoc class},
    }
  \fi
  \addtocounter{lettercount}{1}
  \setcounter{page}{1}
  \setcounter{footnote}{0}
  \fancyhf{}
  \if@twoside
    \fancyhead[LE,RO]{\@isodocheadbox{\@isodocheadR}}
    \fancyhead[RE,LO]{\@isodocheadbox{\@isodocheadL}}
    \fancyfoot[LE,RO]{\@isodocheadbox{\@isodocfootR}}
    \fancyfoot[RE,LO]{\@isodocheadbox{\@isodocfootL}}
  \else
    \fancyhead[L]{\@isodocheadbox{\@isodocheadL}}
    \fancyhead[R]{\@isodocheadbox{\@isodocheadR}}
    \fancyfoot[L]{\@isodocheadbox{\@isodocfootL}}
    \fancyfoot[R]{\@isodocheadbox{\@isodocfootR}}
  \fi
  \fancyhead[C]{\@isodocheadbox{\@isodocheadC}}
  \fancyfoot[C]{\@isodocheadbox{\@isodocfootC}}
  \logo
```

@addresscenter is the center, vertically, of the to-address block: xaddress should be 1 or 3 for left- and right address windows

```
  { \parskip=0pt\parindent=0pt
    \begin{textblock}{\@addresswidth}[0,.5](\xaddress,\@addresscenter)%
        \ifreturn
```

```
        {\def\\{\unskip\enspace{\rmfamily\mdseries\textbullet}%
                \enspace\ignorespaces}%
          \sffamily\bfseries\scriptsize\returnaddress
        }\\[-.8\baselineskip]
        \rule{\hsize}{.2pt}\\
      \fi
      \toname\\\toaddress
  \end{textblock}
}
\subjectpos=\headerpos
\textskip=\headerpos\advance\textskip-12
\ifx\subject\empty\advance\textskip-10\else\advance\subjectpos10\fi
\openingpos=\subjectpos
\ifheader
  \openingpos=\subjectpos\advance\openingpos12
  \isodoc@Tbox{35}{\headerpos}{35}{\noindent
    {\headfont\yourlettertext}\\
    \yourletter
  }
  \isodoc@Tbox{70}{\headerpos}{35}{\noindent
    {\headfont\yourreftext}\\
    \raggedright\yourref
  }
  \isodoc@Tbox{105}{\headerpos}{35}{\noindent
    {\headfont\ourreftext}\\
    \raggedright\ourref
  }
  \isodoc@Tbox{140}{\headerpos}{35}{\noindent
    {\headfont\datetext}\\
    \date
  }
  \ifx\subject\empty\else%
    \isodoc@Tbox{35}{\subjectpos}{140}{\noindent
      \ifx\subjecttext\empty{\bfseries\subject}\else%
        \begin{tabularx}{\hsize}{@{}l>{\raggedright}X@{}}
          \headfont\subjecttext:&\subject
        \end{tabularx}
      \fi
    }
  \fi
\else
  \advance\textskip-12
\fi
```

Create the footfields that occur in `\isodoc@footorder`, starting at the left;

```
\iffooter
  \isodocFootFields
\fi
{ \parskip=0pt\parindent=0pt
  \begin{textblock*}{3mm}(\xfold,\yfold)%
     {\color{markercolor}\rule{\hsize}{.2pt}}
  \end{textblock*}
}
\ifx\undefined\accepttype\else\accept\fi
\noindent\isodoc@Tbox{35}{\openingpos}{140}{\opening\@openingcomma}
\vspace{\textskip mm}
\thispagestyle{empty}
\noindent\ignorespaces#2
\ifclosing{\vskip\closingskip\vskip-\baselineskip
  \parindent=0pt\parskip=\baselineskip\noindent
  \begin{minipage}[t]{\hsize}
      \ifcase\autographversion
```

```
          \par\closing\@closingcomma\\\signature   % 0: closing on the next line
        \or\par\closing\@closingcomma\\[\signatureskip]\signature % 1: whiteskip
        \or\autographA
        \or\autographB
        \or\autographC
        \or\autographD
        \or\autographE
        \or\autographF
        \or\autographG
        \or\autographH
        \else
          \par\Undefined{autograph: \autographversion}\\
        \fi
    \end{minipage}
  }\fi
  \ifencldown\vspace*{\fill}\fi
  \ifx\enclosures\empty\else{\\[\enclosureskip]
    \noindent
    \begin{minipage}[t]{\hsize}
        \setbox1=\vbox{\enclosures}%
        \textbf{\ifdim\ht1>\baselineskip\enclosurestext\else\enclosuretext\fi:}\\
        \enclosures
    \end{minipage}
  }\fi
  \ifx\copyto\empty\else{\\[\copytoskip]
    \noindent
    \begin{minipage}[t]{\hsize}
        \textbf{\copytotext:}\\
        \copyto
    \end{minipage}
  }\fi
  \label{LastPageOf\thelettercount}
}}
```

## 8.3 Internal Macros

`\isodocFootFields` creates the foot fields. Defined here so you can easily replace them with your own version. Some extra space is created at the bottom of the page by calling `\enlargethispage` with a negative value.

`\isodocFootFields`

```
\newcommand{\isodocFootFields}{%
  \footcount=35
  \enlargethispage{-10mm}
  \ForEachX{;}{%
    \setbox0=\hbox{\csname @\thislevelitem\endcsname}
    \ifdim\wd0=0pt\else
      \isodoc@Tbox{\footcount}{\footerpos}{35}{\noindent
        {\headfont\csname\thislevelitem text\endcsname}\\
          \csname @\thislevelitem\endcsname
      }
    \fi
      \advance\footcount35
  }{\isodoc@footorder}
}
```

The accept is produced from `\isodoc@Tbox` and `\isodoc@Cbox` commands only, using the `textpos` package: `\isodoc@Cbox{x}{y}{width}{text}` places `text` in a box of `width` mm, centered around (x,y) in mm:

`\isodoc@Cbox`

```
\def\isodoc@Cbox#1#2#3#4{%
  { \parskip=0pt\parindent=0pt
    \begin{textblock}{#3}[.5,.5](#1,#2)%
        \begin{center}
```

```
          #4
        \end{center}
    \end{textblock}
  }
}
```

\isodoc@Tbox `\isodoc@Tbox{x}{y}{width}{text}` places `text` in a box of `width` mm, with the upper left corner at (x,y) in mm:

```
\long\def\isodoc@Tbox#1#2#3#4{%
  { \parskip0pt\parindent=0pt
    \begin{textblock}{#3}(#1,#2)%
        \begin{minipage}[t]{\hsize}
          \noindent#4
        \end{minipage}
    \end{textblock}
  }
}
```

\accept This macro will have a parameter if other accept forms will have to be programmed:

```
\def\accept{
  \isodoc@Tbox{\xacceptdescription}
       {\yacceptdescription}
       {\wacceptdescription}
       {\acceptdescription}
  \isodoc@Tbox{\xacceptdesc}
       {\yacceptdesc}
       {\wacceptdesc}
       {\acceptdesc}
  \isodoc@Tbox{\xacceptaddress}
       {\yacceptaddress}
       {\wacceptaddress}
       {\ifx\acceptaddress\empty\toname\\\toaddress\else\acceptaddress\fi}
  \isodoc@Cbox{\xacceptreference}
       {\yacceptreference}
       {\wacceptreference}
       {\ocrb\acceptreference}
  \isodoc@Tbox{\xacceptref}
       {\yacceptref}
       {\wacceptref}
       {\baselineskip=\acceptreferenceskip\ocrb\acceptreference}
  \isodoc@Cbox{\xaccepteuros}
       {\yaccepteuros}
       {\waccepteuros}
       {\ocrb\accepteuros}
  \isodoc@Cbox{\xacceptaccount}
       {\yacceptaccount}
       {\wacceptaccount}
       {\ocrb\acceptaccount}
  \isodoc@Cbox{\xacceptcents}
       {\yacceptcents}
       {\wacceptcents}
       {\ocrb\acceptcents}
  \isodoc@Cbox{\xaccepteur}
       {\yaccepteur}
       {\waccepteur}
       {\ocrb\accepteuros}
  \isodoc@Cbox{\xacceptct}
       {\yacceptct}
       {\wacceptct}
       {\ocrb\acceptcents}
}
```

## 8.4 Translations

\isodoc@xxYY Catalan—contributed by Cristian Peraferrer:

```
\def\isodoc@caES{%
  \gdef\amounttext      {Quantitat}
  \gdef\copytotext      {CC}
  \gdef\datetext        {Data}
  \gdef\descriptiontext {Descripció}
  \gdef\enclosurestext  {Annexos}
  \gdef\enclosuretext   {Annex}
  \gdef\invoicetext     {factura}
  \gdef\oftext          {de}
  \gdef\ourreftext      {La nostra referència}
  \gdef\pagetext        {Pàgina}
  \gdef\subjecttext     {Assumpte}
  \gdef\totaltext       {Total}
  \gdef\totext          {A}
  \gdef\yourlettertext  {La seva carta del}
  \gdef\yourreftext     {La seva referència}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {a nom de}
  \gdef\accountnotext   {núm.~de compte}
  \gdef\banknametext    {banc}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {cambra de comerç}
  \gdef\creditoridtext  {creditor id}
  \gdef\daystext        {dies}
  \gdef\ibantext        {\scshape iban}
  \gdef\mandateidtext   {mandate id}
  \gdef\paymentdatatext {Detalls del pagament}
  \gdef\payreftext      {referència}
  \gdef\routingnotext   {nombre de ruta}
  \gdef\termtext        {termini del pagament}
  \gdef\vatnotext       {núm.~iva}
  \gdef\vattext         {iva}
```

footer fields have lower case headers:

```
  \gdef\cellphonetext   {mòbil}
  \gdef\emailtext       {e-mail}
  \gdef\faxtext         {fax}
  \gdef\phonetext       {telèfon}
  \gdef\websitetext     {web}
  \gdef\@isodate        {\number\day\space\ifcase\month\or
    gener\or febrer\or març\or abril\or maig\or juny\or
    juliol\or agost\or setembre\or octubre\or novembre\or desembre\fi
    \space \number\year
  }
}
```

German

```
\def\isodoc@deDE{%
  \gdef\amounttext      {Betrag}
  \gdef\copytotext      {Kopien an}
  \gdef\datetext        {Datum}
  \gdef\descriptiontext {Bezeichnung}
  \gdef\enclosurestext  {Anlagen}
  \gdef\enclosuretext   {Anlage}
  \gdef\invoicetext     {Rechnung}
  \gdef\oftext          {von}
  \gdef\ourreftext      {Unser Zeichen}
  \gdef\pagetext        {Seite}
  \gdef\subjecttext     {Betreff}
```

```
  \gdef\totaltext       {Insgesamt}
  \gdef\totext          {An}
  \gdef\yourlettertext  {Ihr Brief vom}
  \gdef\yourreftext     {Ihr Zeichen}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {Name}
  \gdef\accountnotext   {Konto-Nr.}
  \gdef\banknametext    {Bank}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {Register-Nr.}
  \gdef\creditoridtext  {Creditor ID}
  \gdef\daystext        {Tage}
  \gdef\ibantext        {\scshape iban}
  \gdef\mandateidtext   {Mandate ID}
  \gdef\paymentdatatext {Zahlungsdaten}
  \gdef\payreftext      {Referenz-Nr.}
  \gdef\routingnotext   {\scshape blz}
  \gdef\termtext        {Zahlungstermin}
  \gdef\vatnotext       {USt-IdNr.}
  \gdef\vattext         {MwSt}
```

footer fields have lower case headers:

```
  \gdef\cellphonetext   {Handy}
  \gdef\emailtext       {E-mail}
  \gdef\faxtext         {Fax}
  \gdef\phonetext       {Telefon}
  \gdef\websitetext     {Webseite}
  \gdef\@isodate        {\number\day.\space\ifcase\month\or
    Januar\or Februar\or März\or April\or Mai\or Juni\or
    Juli\or August\or September\or Oktober\or November\or Dezember\fi
    \space\number\year}
}
```

British English

```
\def\isodoc@enGB{%
  \gdef\amounttext      {Amount}
  \gdef\copytotext      {Copy to}
  \gdef\datetext        {Date}
  \gdef\descriptiontext {Description}
  \gdef\enclosurestext  {Enclosures}
  \gdef\enclosuretext   {Enclosure}
  \gdef\invoicetext     {invoice}
  \gdef\oftext          {of}
  \gdef\ourreftext      {Our reference}
  \gdef\pagetext        {Page}
  \gdef\subjecttext     {Subject}
  \gdef\totaltext       {Total}
  \gdef\totext          {To}
  \gdef\yourlettertext  {Your letter of}
  \gdef\yourreftext     {Your reference}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {in the name of}
  \gdef\accountnotext   {account no.}
  \gdef\banknametext    {bank}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {ch.comm.}
  \gdef\creditoridtext  {creditor id}
  \gdef\daystext        {days}
  \gdef\ibantext        {\scshape iban}
  \gdef\mandateidtext   {mandate id}
  \gdef\paymentdatatext {Payment details}
```

```
  \gdef\payreftext      {reference}
  \gdef\routingnotext   {sort code}
  \gdef\termtext        {term of payment}
  \gdef\vatnotext       {vat no.}
  \gdef\vattext         {vat}
```

footer fields have lower case headers:

```
  \gdef\cellphonetext   {cellphone}
  \gdef\emailtext       {email}
  \gdef\faxtext         {telefax}
  \gdef\phonetext       {telephone}
  \gdef\websitetext     {website}
  \if@isodocordinalss
    \gdef\@st{\textsuperscript{st}}
    \gdef\@nd{\textsuperscript{nd}}
    \gdef\@rd{\textsuperscript{rd}}
    \gdef\@th{\textsuperscript{th}}
  \else
    \gdef\@st{st}
    \gdef\@nd{nd}
    \gdef\@rd{rd}
    \gdef\@th{th}
  \fi
  \gdef\@isodate        {\ifcase\day\or
     1\@st\or  2\@nd\or  3\@rd\or  4\@th\or  5\@th\or
     6\@th\or  7\@th\or  8\@th\or  9\@th\or 10\@th\or
    11\@th\or 12\@th\or 13\@th\or 14\@th\or 15\@th\or
    16\@th\or 17\@th\or 18\@th\or 19\@th\or 20\@th\or
    21\@st\or 22\@nd\or 23\@rd\or 24\@th\or 25\@th\or
    26\@th\or 27\@th\or 28\@th\or 29\@th\or 30\@th\or
    31\@st\fi\space\ifcase\month\or
    January\or February\or March\or April\or May\or June\or
    July\or August\or September\or October\or November\or December\fi
    \space \number\year}
}
```

American English

```
\def\isodoc@enUS{%
  \gdef\amounttext      {Amount}
  \gdef\copytotext      {CC}
  \gdef\datetext        {Date}
  \gdef\descriptiontext {Description}
  \gdef\enclosurestext  {Enclosures}
  \gdef\enclosuretext   {Enclosure}
  \gdef\invoicetext     {invoice}
  \gdef\oftext          {of}
  \gdef\ourreftext      {Our reference}
  \gdef\pagetext        {Page}
  \gdef\subjecttext     {Subject}
  \gdef\totaltext       {Total}
  \gdef\totext          {To}
  \gdef\yourlettertext  {Your letter of}
  \gdef\yourreftext     {Your reference}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {in the name of}
  \gdef\accountnotext   {account no.}
  \gdef\banknametext    {bank}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {ch.comm.}
  \gdef\creditoridtext  {creditor id}
  \gdef\daystext        {days}
  \gdef\ibantext        {\scshape iban}
```

```
  \gdef\mandateidtext   {mandate id}
  \gdef\paymentdatatext {Payment details}
  \gdef\payreftext      {reference}
  \gdef\routingnotext   {routing no}
  \gdef\termtext        {term of payment}
  \gdef\vatnotext       {vat no.}
  \gdef\vattext         {vat}
```

footer fields have lower case headers:

```
  \gdef\cellphonetext   {cellphone}
  \gdef\emailtext       {email}
  \gdef\faxtext         {telefax}
  \gdef\phonetext       {telephone}
  \gdef\websitetext     {website}
  \gdef\@isodate        {\ifcase\month\or
    January\or February\or March\or April\or May\or June\or
    July\or August\or September\or October\or November\or December\fi
    \space\number\day, \number\year}
}
```

Spanish—contributed by Cristian Peraferrer:

```
\def\isodoc@esES{%
  \gdef\amounttext      {Cantidad}
  \gdef\copytotext      {CC}
  \gdef\datetext        {Fecha}
  \gdef\descriptiontext {Descripción}
  \gdef\enclosurestext  {Anexos}
  \gdef\enclosuretext   {Anexo}
  \gdef\invoicetext     {factura}
  \gdef\oftext          {de}
  \gdef\ourreftext      {Nuestra referencia}
  \gdef\pagetext        {Página}
  \gdef\subjecttext     {Asunto}
  \gdef\totaltext       {Total}
  \gdef\totext          {A}
  \gdef\yourlettertext  {Su carta de}
  \gdef\yourreftext     {Su referencia}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {a nombre de}
  \gdef\accountnotext   {núm.~de cuenta}
  \gdef\banknametext    {banco}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {cámara de comercio}
  \gdef\creditoridtext  {creditor id}
  \gdef\daystext        {días}
  \gdef\ibantext        {\scshape iban}
  \gdef\mandateidtext   {mandate id}
  \gdef\paymentdatatext {Detalles de pago}
  \gdef\payreftext      {referencia}
  \gdef\routingnotext   {número de ruta}
  \gdef\termtext        {plazo de pago}
  \gdef\vatnotext       {núm.~iva}
  \gdef\vattext         {iva}
```

footer fields have lower case headers:

```
  \gdef\cellphonetext   {móvil}
  \gdef\emailtext       {e-mail}
  \gdef\faxtext         {fax}
  \gdef\phonetext       {teléfono}
  \gdef\websitetext     {web}
  \gdef\@isodate        {\number\day\space\ifcase\month\or
    enero\or febrero\or marzo\or abril\or mayo\or junio\or
```

```
    julio\or agosto\or septiembre\or octubre\or noviembre\or diciembre\fi
    \space \number\year
  }
  \def\openingcomma     {:}
}
```

French

```
\def\isodoc@frFR{%
  \gdef\amounttext      {Montant}
  \gdef\copytotext      {Copie à}
  \gdef\datetext        {Date}
  \gdef\descriptiontext {Description}
  \gdef\enclosurestext  {Pièces jointes}
  \gdef\enclosuretext   {Pièce jointe}
  \gdef\invoicetext     {facture}
  \gdef\oftext          {de}
  \gdef\ourreftext      {Nos références}
  \gdef\pagetext        {Page}
  \gdef\subjecttext     {Objet}
  \gdef\totaltext       {Total}
  \gdef\totext          {À l'attention de}
  \gdef\yourlettertext  {Votre lettre du}
  \gdef\yourreftext     {Vos références}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {au nom de}
  \gdef\accountnotext   {no.~compte}
  \gdef\banknametext    {banque}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {c.c.i.}
  \gdef\creditoridtext  {creditor id}
  \gdef\daystext        {jours}
  \gdef\ibantext        {\scshape iban}
  \gdef\mandateidtext   {mandate id}
  \gdef\paymentdatatext {Détails de paiement}
  \gdef\payreftext      {référence}
  \gdef\routingnotext   {numéro d'acheminement}
  \gdef\termtext        {terme}
  \gdef\vatnotext       {no.~t.v.a.}
  \gdef\vattext         {t.v.a.}
```

footer fields have lower case headers:

```
  \gdef\cellphonetext   {portable}
  \gdef\emailtext       {email}
  \gdef\faxtext         {téléfax}
  \gdef\phonetext       {téléphone}
  \gdef\websitetext     {site web}
  \gdef\@isodate        {\number\day\ifnum\day=1$^{er}$\fi\space\ifcase\month\or
    janvier\or février\or mars\or avril\or mai\or juin\or
    juillet\or août\or septembre\or octobre\or
    novembre\or décembre\fi \space \number\year}
}
```

Italian—contributed by Walter Giocoso:

```
\def\isodoc@itIT{%
  \gdef\amounttext      {Prezzo}
  \gdef\copytotext      {Per conoscenza a}
  \gdef\datetext        {Data}
  \gdef\descriptiontext {Descrizione}
  \gdef\enclosurestext  {Allegati}
  \gdef\enclosuretext   {Allegato}
  \gdef\invoicetext     {fattura}
  \gdef\oftext          {di}
```

```
  \gdef\ourreftext      {Nostro riferimento}
  \gdef\pagetext        {Pagina}
  \gdef\subjecttext     {Oggetto}
  \gdef\totaltext       {Totale}
  \gdef\totext          {All'attenzione di}
  \gdef\yourlettertext  {Vostra lettera del}
  \gdef\yourreftext     {Vostro riferimento}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {intestato a}
  \gdef\accountnotext   {n°~del conto}
  \gdef\banknametext    {banca}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {}
  \gdef\creditoridtext  {creditor id}
  \gdef\daystext        {giorni}
  \gdef\ibantext        {\scshape iban}
  \gdef\mandateidtext   {mandate id}
  \gdef\paymentdatatext {Dettagli di pagamento}
  \gdef\payreftext      {riferimento}
  \gdef\routingnotext   {numero di routing}
  \gdef\termtext        {scadenza}
  \gdef\vatnotext       {partita i.v.a.}
  \gdef\vattext         {i.v.a.}
```

footer fields have lower case headers:

```
  \gdef\cellphonetext   {cellulare}
  \gdef\emailtext       {e-mail}
  \gdef\faxtext         {fax}
  \gdef\phonetext       {telefono}
  \gdef\websitetext     {sito web}
  \gdef\@isodate        {\number\day\ifnum\day=1\fi
    ~\ifcase\month\or
    Gennaio\or Febbraio\or Marzo\or Aprile\or Maggio\or Giugno\or
    Luglio\or Agosto\or Settembre\or Ottobre\or Novembre\or Dicembre\fi
    \space \number\year}
}
```

Norwegian—contributed by Sveinung Heggen:

```
\def\isodoc@nbNO{%
  \gdef\amounttext      {Beløp}
  \gdef\copytotext      {Kopi til}
  \gdef\datetext        {Dato}
  \gdef\descriptiontext {Beskrivelse}
  \gdef\enclosurestext  {Vedlegg}
  \gdef\enclosuretext   {Vedlegg}
  \gdef\invoicetext     {faktura}
  \gdef\oftext          {av}
  \gdef\ourreftext      {Vår ref}
  \gdef\pagetext        {Side}
  \gdef\subjecttext     {Vedr}
  \gdef\totaltext       {Total}
  \gdef\totext          {Til}
  \gdef\yourlettertext  {Deres brev av}
  \gdef\yourreftext     {Deres ref}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {til}
  \gdef\accountnotext   {faktura nr}
  \gdef\banknametext    {bank}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {}
  \gdef\creditoridtext  {creditor id}
```

```
  \gdef\daystext        {dager}
  \gdef\ibantext        {\scshape iban}
  \gdef\mandateidtext   {mandate id}
  \gdef\paymentdatatext {Betalingsdetaljer}
  \gdef\payreftext      {referanse}
  \gdef\routingnotext   {routing-nummer}
  \gdef\termtext        {betalingsfrist}
  \gdef\vatnotext       {org.~nr.}
  \gdef\vattext         {mva}
```

footer fields have lower case headers:

```
  \gdef\cellphonetext   {mobil}
  \gdef\emailtext       {e-post}
  \gdef\faxtext         {telefaks}
  \gdef\phonetext       {telefon}
  \gdef\websitetext     {hjemmeside}
  \gdef\@isodate        {\number\day.\space\ifcase\month\or
    januar\or februar\or mars\or april\or mai\or juni\or
    juli\or august\or september\or oktober\or november\or desember\fi
   \space \number\year}
}
```

Belgian Dutch—contributed by Serge Stroobandt:

```
\def\isodoc@nlBE{%
  \gdef\amounttext      {Bedrag}
  \gdef\copytotext      {Kopie aan}
  \gdef\datetext        {Datum}
  \gdef\descriptiontext {Omschrijving}
  \gdef\enclosurestext  {Bijlagen}
  \gdef\enclosuretext   {Bijlage}
  \gdef\invoicetext     {factuur}
  \gdef\oftext          {van}
  \gdef\ourreftext      {Ons kenmerk}
  \gdef\pagetext        {Pagina}
  \gdef\subjecttext     {Betreft}
  \gdef\totaltext       {Totaal}
  \gdef\totext          {Aan}
  \gdef\yourlettertext  {Uw brief van}
  \gdef\yourreftext     {Uw kenmerk}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {op naam van}
  \gdef\accountnotext   {rekeningnummer}
  \gdef\banknametext    {bank}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {ondernemingsnummer}
  \gdef\creditoridtext  {incassant id}
  \gdef\daystext        {dagen}
  \gdef\ibantext        {\scshape iban}
  \gdef\mandateidtext   {kenmerk machtiging}
  \gdef\paymentdatatext {Betaalgegevens}
  \gdef\payreftext      {kenmerk}
  \gdef\routingnotext   {routenummer}
  \gdef\termtext        {betalingstermijn}
  \gdef\vatnotext       {ondernemingsnummer}
  \gdef\vattext         {btw}
```

footer fields have lower case headers:

```
  \gdef\cellphonetext   {mobiel}
  \gdef\emailtext       {e-mail}
  \gdef\faxtext         {fax}
  \gdef\phonetext       {telefoon}
  \gdef\websitetext     {webstek}
```

```
  \gdef\@isodate        {\number\day\space\ifcase\month\or
    januari\or februari\or maart\or april\or mei\or juni\or juli\or
    augustus\or september\or oktober\or november\or december\fi
    \space \number\year}
}
```

Dutch

```
\def\isodoc@nlNL{%
  \gdef\amounttext      {Bedrag}
  \gdef\copytotext      {Kopie aan}
  \gdef\datetext        {Datum}
  \gdef\descriptiontext {Omschrijving}
  \gdef\enclosurestext  {Bijlagen}
  \gdef\enclosuretext   {Bijlage}
  \gdef\invoicetext     {\scshape rekening}
  \gdef\oftext          {van}
  \gdef\ourreftext      {Ons kenmerk}
  \gdef\pagetext        {Bladnummer}
  \gdef\subjecttext     {Onderwerp}
  \gdef\totaltext       {Totaal}
  \gdef\totext          {Aan}
  \gdef\yourlettertext  {Uw brief van}
  \gdef\yourreftext     {Uw kenmerk}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {ten name van}
  \gdef\accountnotext   {rekeningnummer}
  \gdef\banknametext    {bank}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {kvk}
  \gdef\creditoridtext  {incassant id}
  \gdef\daystext        {dagen}
  \gdef\ibantext        {\scshape iban}
  \gdef\mandateidtext   {kenmerk machtiging}
  \gdef\paymentdatatext {Betaalgegevens}
  \gdef\payreftext      {kenmerk}
  \gdef\routingnotext   {banknummer}
  \gdef\termtext        {betalingstermijn}
  \gdef\vatnotext       {btwnummer}
  \gdef\vattext         {btw}
```

footer fields have lower case headers:

```
  \gdef\cellphonetext   {mobiel}
  \gdef\emailtext       {e-mail}
  \gdef\faxtext         {fax}
  \gdef\phonetext       {telefoon}
  \gdef\websitetext     {webstek}
  \gdef\@isodate        {\number\day\space\ifcase\month\or
    januari\or februari\or maart\or april\or mei\or juni\or juli\or
    augustus\or september\or oktober\or november\or december\fi
    \space \number\year}
}
```

Serbian—contributed by Zoran T. Filipovic:

```
\def\isodoc@srRS{%
  \gdef\amounttext      {Iznos}
  \gdef\copytotext      {Kopije}
  \gdef\datetext        {Datum}
  \gdef\descriptiontext {Opis}
  \gdef\enclosurestext  {Prilozi}
  \gdef\enclosuretext   {Prilog}
  \gdef\invoicetext     {faktura}
  \gdef\oftext          {od}
```

```
  \gdef\ourreftext      {Naš broj}
  \gdef\pagetext        {Strana}
  \gdef\subjecttext     {Predmet}
  \gdef\totaltext       {Ukupno}
  \gdef\totext          {U}
  \gdef\yourlettertext  {Vaše pismo od}
  \gdef\yourreftext     {Vaš broj}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {na ime}
  \gdef\accountnotext   {račun br.}
  \gdef\banknametext    {banka}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {spisak br.}
  \gdef\creditoridtext  {creditor id}
  \gdef\daystext        {dana}
  \gdef\ibantext        {\scshape iban}
  \gdef\mandateidtext   {mandate id}
  \gdef\paymentdatatext {Podaci o bankarskom sektoru}
  \gdef\payreftext      {dokumet br.}
  \gdef\routingnotext   {blz}
  \gdef\termtext        {rok plaćanja}
  \gdef\vatnotext       {porez br.}
  \gdef\vattext         {pdv}
```

footer fields have lower case headers:

```
  \gdef\cellphonetext   {mobilni}
  \gdef\emailtext       {email}
  \gdef\faxtext         {telefax}
  \gdef\phonetext       {telefon}
  \gdef\websitetext     {website}
  \gdef\@isodate        {\number\day.~\ifcase\month\or
    Januar\or Februar\or Mart\or April\or Maj\or Jun\or
    Jul\or Avgust\or Septembar\or Oktobar\or Novembar\or Decembar\fi
    \space\number\year}
}
```

Swedish—contributed by Joakim Verona:

```
\def\isodoc@svSE{%
  \gdef\amounttext      {Summa}
  \gdef\copytotext      {CC}
  \gdef\datetext        {Datum}
  \gdef\descriptiontext {Beskrivning}
  \gdef\enclosurestext  {Bifogat}
  \gdef\enclosuretext   {Bifogat}
  \gdef\invoicetext     {Faktura}
  \gdef\oftext          {av}
  \gdef\ourreftext      {Vår referens}
  \gdef\pagetext        {Sida}
  \gdef\subjecttext     {Ärende}
  \gdef\totaltext       {Total}
  \gdef\totext          {Till}
  \gdef\yourlettertext  {Ert~brev}
  \gdef\yourreftext     {Er~Referens}
```

payment data entries, all lower case, except the header:

```
  \gdef\accountnametext {kontoägare}
  \gdef\accountnotext   {kontonummer}
  \gdef\banknametext    {bank}
  \gdef\bictext         {\scshape bic}
  \gdef\chambertext     {handelskammare}
  \gdef\creditoridtext  {creditor id}
  \gdef\daystext        {dagar}
```

```
\gdef\ibantext        {\scshape iban}
\gdef\mandateidtext   {mandate id}
\gdef\paymentdatatext {Betalningsdetaljer}
\gdef\payreftext      {faktura}
\gdef\routingnotext   {routing no}
\gdef\termtext        {betalningsvillkor}
\gdef\vatnotext       {org.~nr}
\gdef\vattext         {moms}
```

footer fields have lower case headers:

```
\gdef\cellphonetext   {mobil}
\gdef\emailtext       {e-mail}
\gdef\faxtext         {telefax}
\gdef\phonetext       {telefon}
\gdef\websitetext     {web}
\gdef\@isodate        {\number\day\space~\ifcase\month\or
   januari\or februari\or mars\or april\or maj\or juni\or
   juli\or augusti\or september\or oktober\or november\or december\fi
   \space\number\year}
}
```

⟨/class⟩

# Change History


v0.01
General: Initial version . . . . . 1
v0.02
General: - added options phoneprefix, routingno, logoaddress
- accountname now optional
- accountnumber ⇒ accountno
- german and french translations corrected
- indents removed in header fields
- expect printer to have more unprintable border
- ascriptiontext ⇒ accountnametext for dutch
- Interdocument language changes now work
- Vatno, if defined, is reported with paymentdata
- country in returnaddress now separated with dot
- option changes kept local to the letter/invoice
- English/American accountname text adapted . . . . . 1
v0.03
General: several errors in documentation corrected . . . . . 1
v0.03b
General: - non-zero parskip generated whitespace in standard textblocks
- several accept positions fixed,
- added option shift,
- whitespace problems solved,
- added option currency,
- added option cityzip - without documentation . . . . . 1
v0.04
General: - options shift, currency, cityzip added
- norwegian translations added (thanks Sveinung Heggen) . . . . . 1
v0.05
General: - text misplacement in subject-less letters
- corrected
- norwegian translations corrected . . . 1
v0.06
General: - moved all documentation files in subdirectory doc,
- because files appeared to be wrongly placed on the
- TeX Collection DVD
- Some minor corrections . . . . . 1
v0.07
General: - using eurosym package instead of marvosym
- using frenchb package instead of french
- added addresswidth option, default stays 2 cols
- changes suggested by Fabrice Niessen (thanks)
- added header/noheader options
- added bodyshift option
- date format can be yyyy-mm-dd or a literal today
- added forcedate option to enter anything for date
- added foldleft and foldright options, default stays right

- headingcolor, if defined, colors fancy headings
- headcolor, if defined, colors headings in header and footer
- foldmarkcolor, if defined, colors foldmark . . . . . 1
v0.08
General: - now compatible with luaLaTeX
- made independent of babel and polyglossia packages: user must Require those, if needed
- handling of font and encoding now left to the user
- language names same as in babel (norwegian ⇒ norsk)
- option language added
- option english is synonym for language-UKenglish
- option american is synonym for language-USenglish
- language options *only* change keyword translations
- new translations added: italian, spanish, catalan, serbian
- option fontpackage removed
- option cityzip moves zip behind city
- now compatible with luaLaTeX
- positioning of headings, subject, opening, body text fixed
- repaired several minor bugs . . . . . 1
v0.09
General: - subject text uses full textwidth; use newlines if needed
- introducing isodocsymbols.sty
- new option closingcomma
- subject uses full textwidth
- using foreach package for footfields
- removed some unwanted whitespace 1
v0.10
General: - bug: missing prefixes for phone numbers
- added option footorder, setting the order of footer fields . . . . . 1
v0.11
General: - added color and tabularx to required packages
- removed hypersetup (author/version info); didn't work . . . . . 1
v1.00
General: This version has incompatibilites with previous versions:
- languages renamed according to ISO 3166
- options dutch, english, american, german, french now obsolete, use language option with argument nl-NL, en-GB, en-US, de-DE, fr-FR respectively.
- localbank option removed, as IBAN is now used for all accounts
- footer fields appear in the order in which they were defined with the footorder option.
- the autograph command has been completely redefined and simplified. . . 1
v1.00 continued
General: - documentation improved
- empty foot fields can be added with extra semicolons in the footorder option.
- copyto option added
- vertical bar in invoices is automatically extended for multiline entries.
- vertical bar in invoices can be suppressed with option novertical
- if class option twoside is set, letters and invoices start recto.
- the itotal command got an optional argument.
- closingcomma did not work
- added pdfauthor and pdfcreator (isodoc) to pdf-comment
- reorganized documentation directory and install script . . . . . 1
v1.01
General: - vattext was missing in all language files
- aus ⇒ von; subjecttext ⇒ empty for de-DE
- closing parts in minipages for better page break
- more comment on toname, today, language, subject
- moved contents of isodocsymbols.sty into isodoc.dtx and removed it
- empty subjectext generates bold subject line (habit in de-DE)
- page headings forced in one line
- more instructions for first line of address
- phone number prefix +nn\, instead of +nn– . . . . . 1
v1.02
General: - installing in correct dirs, so texdoc finds the doc
- more comment . . . . . 1
v1.03
General: - added logo and nologo options
- changed definitions for fancy headings and footings to allow for easy adaptation in style files. . . . . 1
v1.04
General: - footers and copyto did not work correctly.
- closingskip option removed; use dimen signatureskip in style file.
- some skips now have own dimen for easier adaptation in style file. . . . . 1
v1.05
General: - README and inst script reorganized . . . . . 1
v1.06
General: - bug causing "No line here to end" error

- font and footskip warnings removed . 1
v1.07
General: - use xcolor, not color package; minor changes in example style files - swedish-Sweden (sv-SE) language added - ordinal suffixes can be superscripted with ordinalss option - removed boldface from the smallcaps invoice opening to prevent font problems - using the term ”paymentdata” instead of ”accountdata”, but both do work. - improved documentation, in particular about footer fields. - accountno did not appear (typo). . . . 1
v1.08
General: same as ourref - new bankname option for payment data - footer fields generated in a command that can thus be redefined - completely reorganized by incorporating all doc and help files in isodoc.dtx - install with make . . . . . 1
v1.09
General: - documentation: translations are in macros, not files . . . . . 1
v1.10
General: - honor a few luatex modifications 1
v1.11
General: - use memoir instead of article class for more flexibility - font in ‘preprinted’ headers can now be set with headfont macro - an empty closing and its closingcomma will not be typeset at all - Swedish terminology revisited (thanks Bo Thidé) - Obsolete language keys removed - Country code in zip code now followed by dash instead of space - daystext was typeset twice - payment data terminology and footer headers all lower case (except for German) . . . . . 1

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