

# 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<sup>1</sup>, 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.<sup>2</sup> 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.<sup>3</sup>

The general setup of a document producing one or more letters is (see figures 1–3, page 13–14, 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 16):

```
\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 `memoir` class and you can use its 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, 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.

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

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<sup>1</sup>CTAN: ntgclass/briefdoc.pdf

<sup>2</sup>CTAN: textpos/textpos.pdf

<sup>3</sup>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!

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.

<code>language= ...</code>	sets the interface language to any language defined by the class. Currently these are: <code>en-GB</code> , <code>en-US</code> , <code>fr-FR</code> , <code>de-DE</code> , <code>nl-NL</code> , <code>nl-BE</code> , <code>it-IT</code> , <code>es-ES</code> , <code>ca-ES</code> , <code>nb-NO</code> , <code>sr-RS</code> ; the hyphens in these names are optional, so you can, for example, also write <code>enGB</code> .
<code>ordinalss</code>	sets ordinal suffixes in dates (like <code>st</code> , <code>nd</code> , <code>rd</code> , <code>th</code> ) superscripted. The default is to keep them on the line. Note that you must use this option <i>before</i> 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.

<code>logo</code>	Switches the logo on; this is the default, but still useful if you have used the <code>nologo</code> option in your style file.
<code>nologo</code>	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 <code>nologo</code> for the paper version and <code>logo</code> for a PDF to be sent by email.
<code>company= ...</code>	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 <code>returnaddress</code> keyword.) For private documents, use your name or nickname here.
<code>logoaddress= ...</code>	Contact person's data; use <code>\\"</code> commands for line breaks. If you don't define this option, the data will be constructed from the following options.
<code>who= ...</code>	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. <sup>4</sup>
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. <sup>5</sup>
[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 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.

## 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

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<sup>4</sup>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.

<sup>5</sup>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 \ ".

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 yyyyymmdd 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 ( <i>not \today!</i> ) 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 <b>Enclosure:</b> followed by the value of the keyword. Multiple enclosures can be separated with \\ commands. If those are found, the starting text will be <b>Enclosures:</b> . It appears under the closing, with a white line in between. <sup>6</sup>

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<sup>6</sup>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.

<code>copyto= ...</code>	This keyword can be used to add a note, at the end of the document, which starts with <b>Copy to:</b> 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. <sup>7</sup>
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## 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`.

<code>[no]footer</code>	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.
<code>footorder= ...</code>	changes the order of footer fields. The argument should be a semicolon (;) separated list of field names. By default this string is defined as <code>website;phone;cellphone;email</code> . Empty fields can be inserted with extra semicolons.
<code>phoneprefix</code>	prefix for phone numbers. The default is 0; it will be changed into +nn\, (where nn is the area code) if the <code>foreign</code> option is used.
<code>phone= ...</code>	if defined <sup>8</sup> , and <code>phone</code> occurs in the <code>footorder</code> string, prints « <code>phone</code> » in the page footer, with the contents under it, prefixed with a 0 or, if the <code>foreign</code> option was used, the area code (set with the <code>areacode</code> option.) Telephone numbers should thus be entered without a prefix.
<code>cellphone= ...</code>	same for <code>cellphone</code> ...
<code>fax= ...</code>	<code>fax</code> ...
<code>email= ...</code>	<code>email</code> ...
<code>website= ...</code>	and <code>website</code> .

## 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.

<code>nofold</code>	Disable folding marks.
<code>foldleft</code>	The folding mark is printed in the left margin.
<code>foldright</code>	The folding mark is printed in the right margin. This is the default.
<code>fold2</code>	Folding mark at about halfway, set for tight fitting into a 220x162 mm envelope, with a tolerance of 2 mm at both sides.
<code>fold3</code>	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.
<code>fold= ...</code>	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.

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<sup>7</sup>The whitespace in between can be influenced with the dimen \copytoskip, default \baselineskip

<sup>8</sup>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.

## 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. <sup>9</sup>
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

## 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.

<sup>9</sup>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!

[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
acceptpreference	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 and 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:
	<pre>\iitem{item 1}{amount 1} \iitem{item 2}{amount 2} \itotal[Subtotal]{amount} ... \iitem{item n}{amount n} \itotal{amount}</pre>
\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 \baselineskip 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 ( <i>Best regards</i> ) if you use the autograph option with a value from 2 through 9. The position of the signature ( <i>Betty</i> ) 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...)
	<b>How to design an autograph in 4 steps:</b>
	<ol style="list-style-type: none"> <li>1. Make a scan of your signature on a white background. Remove the white background using an image manipulation program such as the gimp (<i>layer</i> ⇒ <i>transparency</i> ⇒ <i>color to alpha</i>) 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 <i>over</i> the image.</li> <li>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.</li> <li>3. Same for the signature, to use as argument 4.</li> <li>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 <i>height</i>.</li> </ol>
\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 12. 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:

	command	ASCII	result
\LetterSymbol			✉
\EuroSymbol		66	€
\EUR		164	€
\EmailSymbol		99	✉
\PhoneSymbol		107	☎
\MobileSymbol		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`.

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}
\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,
```

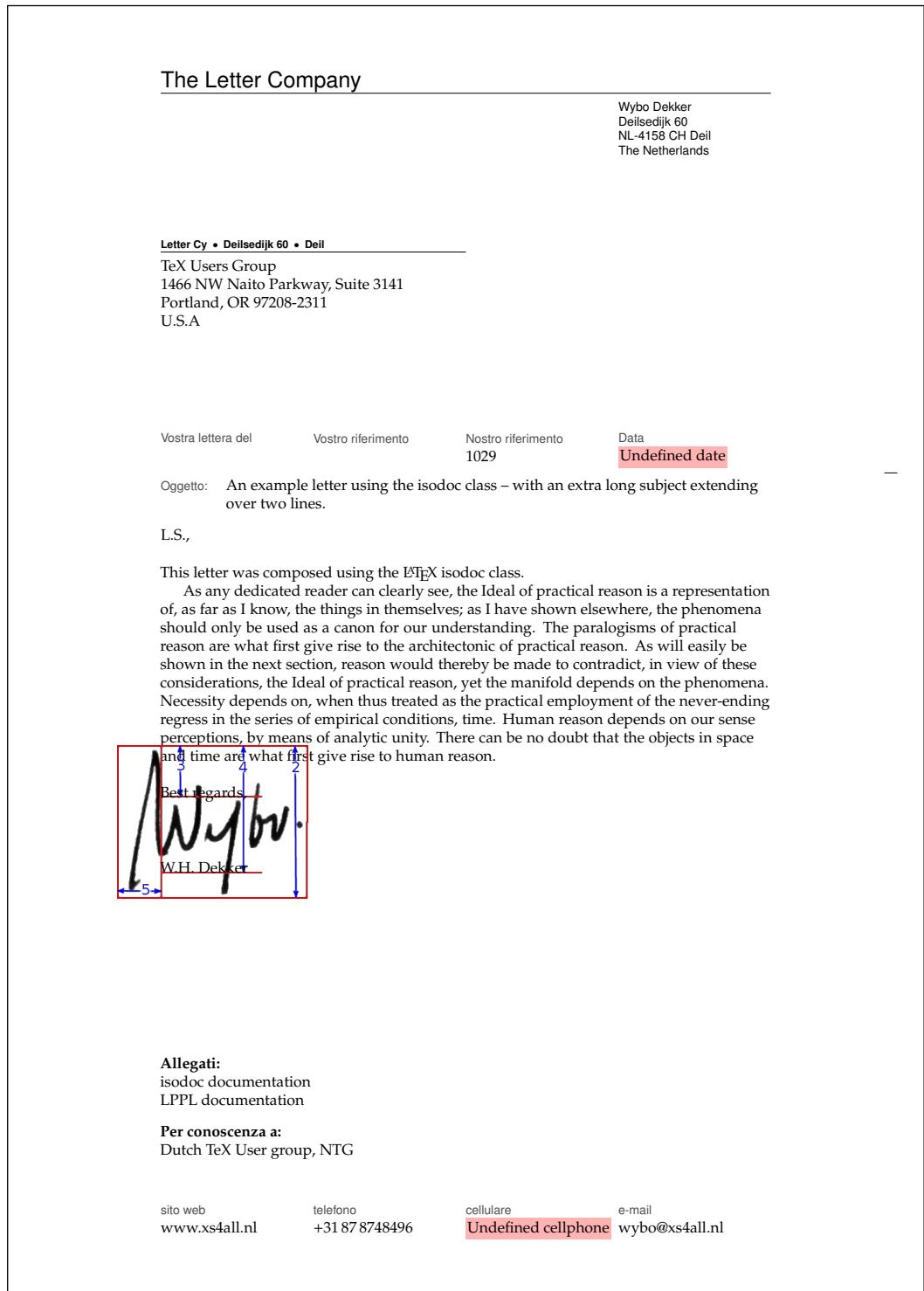


Figure 1: Minimal letter example

```

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}
\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

```

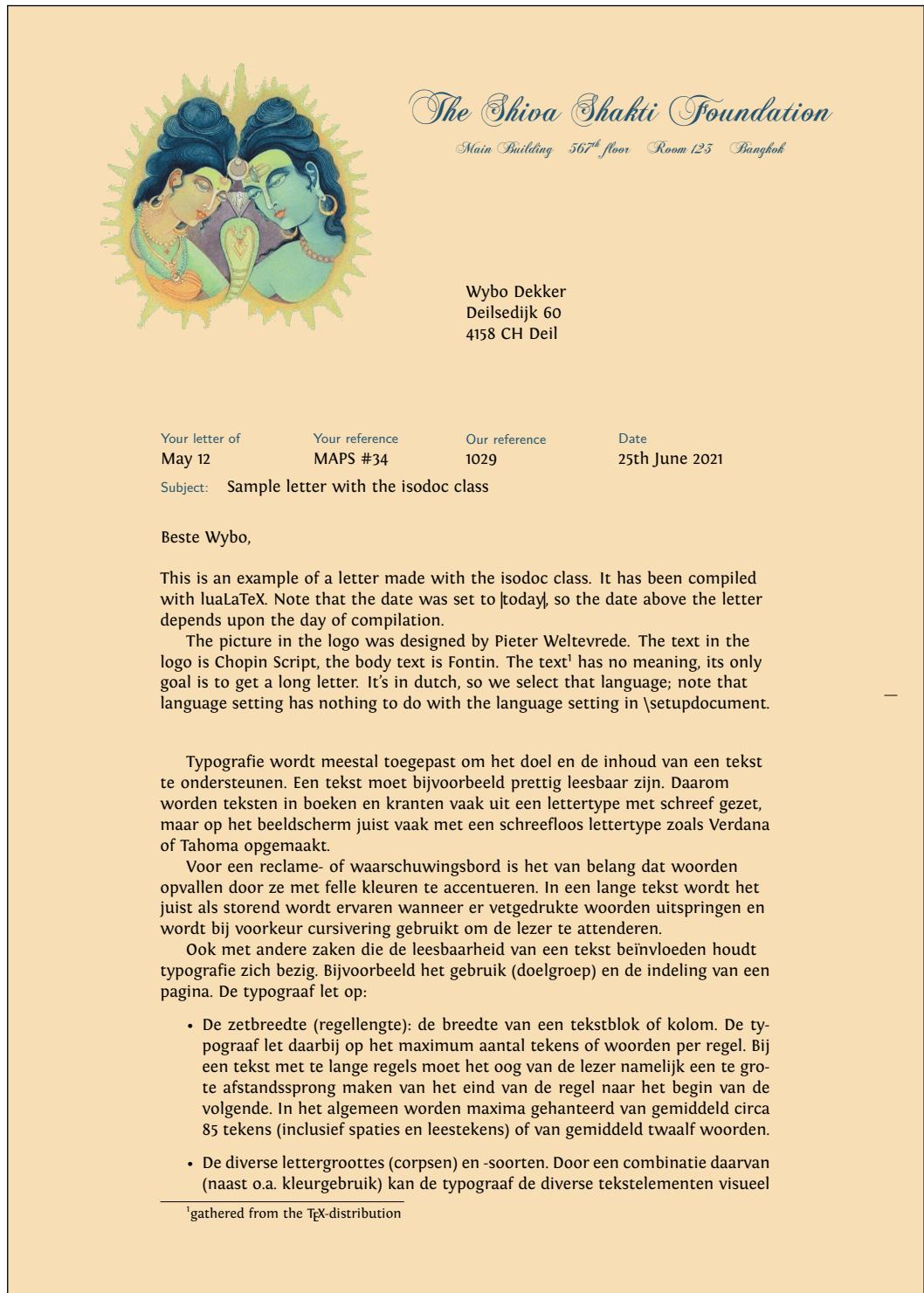


Figure 2: Long letter example with a non-standard logo, page 1

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 blijven van inhoudelijke eenheden
- Het blijven 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,<sup>2</sup> 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 aanhalingsstekens 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

<sup>2</sup>en wat u nog maar zelf kunt bedenken...

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

```

}

\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 Weltevreden.
    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.

## 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
}

```

# 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	<b>15,60</b>

## Betaalgegevens:

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

webstek  
[www.xs4all.nl](http://www.xs4all.nl)

telefoon  
087 8748496

mobiel  
06 3033 3955

e-mail  
[wybo@xs4all.nl](mailto:wybo@xs4all.nl)

Figure 4: Invoice example

```
\end{document}
```

The invoice style file used here looks like:

```
\NeedsTeXFormat{LaTeX2e}
\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.

## 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{item{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.

**NTG** NEDERLANDSTALIGE T<sub>E</sub>X 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

Conditie: deze strook niet meezendend

Conditie: euro-acceptgiro

Conditie: over te schrijven/te storten

Conditie: euro 40 euro 00 ct 4000 0000 2006 0308 +

Conditie: handtekening

Conditie: zij alle rode rubrieken ingevuld?

Conditie: formulier uitsluitend bestemd voor betaling in euro's

Conditie: 110875-E05  
D002

Conditie: formulier met blauwe of zwarte inkt invullen

Conditie: © gezamenlijke banken en postbank

Conditie: nadruk verboden

Conditie: de ruimte hieronder niet beschrijven

Conditie: niet vullen

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

Conditie: 0021306238+ 12>

Figure 5: Invoice example with accept form

## 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 `lualatex 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.

## 8 Implementation

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

```
1 <*class>
2 \ifx\pdfoutput\undefined\else%
3   \ifnum\pdfoutput=1\else%
4     \ClassError{isodoc}{Compile me with pdflatex, lualatex or xelatex!}{}%
5   \fi
6 \fi
7 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{memoir}}
8 \ProcessOptions
9 \LoadClass[article]{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.

```
10 \RequirePackage{xcolor,tabularx,graphicx,xstring,calc}
11 \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.

```
12 \setstocksize{297mm}{210mm}
13 \settrimmedsize{\stockheight}{\stockwidth}{*}
14 \settypeblocksize{237mm}{140mm}{*}
15 \setlrmargins{*}{*}{1}
16 \setulmargins{35mm}{*}{*}
17 \setheadfoot{\baselineskip}{\baselineskip}
18 \checkandfixthelayout
19 \RequirePackage[absolute,overlay]{textpos}
20 \TPGrid{210}{297}
```

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

`headcolor`: color for the header and footer field texts  
`headingcolor`: color for the fancy headings  
`markercolor`: color for the folding marks

```
21 \definecolor{headcolor}{gray}{0}
22 \definecolor{headingcolor}{gray}{0}
23 \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

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

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

```
27 \definecolor{isodocpink}{rgb}{1,.7,.7}
28 \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.

```
29 \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:

```
30 \def\@xyshift#1,#2@@{\def\@xshift{#1}\def\@yshift{#2}}
31 \define@key{isodoc}{shift}{%
```

```

32  \xyshift#1@@@
33  \AtBeginDocument{\textblockorigin{\xshift mm}{\yshift mm}}
34 }

vertical The vertical option prints a vertical bar in invoices between description and amount –
novertical (this is the default), the novertical option suppresses it.
35 \define@key{isodoc}{vertical}[\verticaltrue]{\verticaltrue}
36 \define@key{isodoc}{novertical}[\verticaltrue]{\verticalfalse}
37                                     \newif\ifvertical\verticaltrue

Several items in the letter/invoice will be different in documents that are to be sent abroad;
foreign this is set with the foreign option, false by default:
38 \define@key{isodoc}{foreign}[\foreigntrue]{\foreigntrue}
39                                     \newif\ifforeign\foreignfalse

cityzip By default, the zip code is typeset before the city. The cityzip option reverses this:
40 \define@key{isodoc}{cityzip}[\cityziptrue]{\cityziptrue}
41                                     \newif\ifcityzip\cityzipfalse

language Set the language; en-GB, set at the \EndOfClass is the default.
42 \define@key{isodoc}{language}{
43   \StrSubstitute{#1}{-}{}{\@iso}
44   \ifcsname isodoc@\@iso\endcsname\csname isodoc@\@iso\endcsname\else
45     \ClassError{isodoc}{Unknown language #1}{}
46   \fi
47 }

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:
48 \define@key{isodoc}{ordinalss}[\@isodocordinalsstrue]{%
49   \ifx\yourlettertext\undefined%
50     \@isodocordinalsstrue
51   \else
52     \ClassError{isodoc}{%
53       You must use the ordinalss option before any language option}{}
54   \fi
55 }
56 \newif\if@isodocordinalss\@isodocordinalssfalse

fill The default is to have left, but not right justification, allowing for hyphenation in extreme
nofill cases:
57 \define@key{isodoc}{fill}  []{\rightskip=1\rightskip}
58 \define@key{isodoc}{nofill}[]{\rightskip=0mm plus 35mm}
59                                     \rightskip=0mm plus 35mm

```

### 8.1.2 Logo

company The logo, by default, consists of a large company or personal name on top a rule, with a
logoaddress contact person's name (probably your own name) and address hanging under the rule. Its
who contents are defined by the following options:
street
city
zip
country
countrycode
60 \define@key{isodoc}{logo}[\@isodoclogotrue]{\@isodoclogotrue}
61 \define@key{isodoc}{nologo}[\@isodoclogofalse]{\@isodoclogofalse}
62 \newif\if@isodoclogo\@isodoclogotrue
63 \define@key{isodoc}{company} {\def\company{\#1}}
64 \def\company{\Undefined{company}}
65 \define@key{isodoc}{logoaddress}{\def\logoaddress{\#1}}
66 \def\logoaddress{}
67 \define@key{isodoc}{who} {\def\who{\#1}}
68 \def\who{\Undefined{who}}
69 \define@key{isodoc}{street} {\def\street{\#1}}
70 \def\street{\Undefined{street}}
71 \define@key{isodoc}{city} {\def\city{\#1}}
72 \def\city{\Undefined{city}}
73 \define@key{isodoc}{country} {\def\country{\#1}}
74 \def\country{\Undefined{country}}
75 \define@key{isodoc}{countrycode}{\def\countrycode{\#1}}
76 \def\countrycode{\Undefined{countrycode}}

```

77 \define@key{isodoc}{zip}          {\def\zip{\#1}}
78                                \def\zip{\Undefined{zip}}
79 \def\prezip{\iffforeign\countrycode-\else\fi}

```

### 8.1.3 Address window

**leftaddress**      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.

```

80 \define@key{isodoc}{leftaddress} []{\def\xaddress{35}}
81                                \def\xaddress{35}
82 \define@key{isodoc}{rightaddress}[]{\def\xaddress{105}}
83 \define@key{isodoc}{addresscenter} {\def@addresscenter{\#1}}
84                                \def@addresscenter{63.5}
85 \define@key{isodoc}{addresswidth}  {\def@addresswidth{\#1}}
86                                \def@addresswidth{70}

```

**to**      The `to` option takes the addressee's address lines. Use `\` to separate lines. The info will be split by `\processsto` 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:

```

87 \define@key{isodoc}{to}{\processsto{\#1}\def\toname{Various people}
88                                \def\toaddress{\Undefined{to}}
89 \long\def\processsto#1{\xproc #1\\@@@\ifx\toaddress\empty
90     \else \yproc #1@@@\fi}
91 \long\def\xproc #1\\#2@@@\gdef\toname{\#1}\gdef\toaddress{\#2}
92 \long\def\yproc #1\\#2@@@\gdef\toaddress{\#2}}

```

**return**      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:

```

93 \define@key{isodoc}{return}    []{\returntrue}
94                                \newif\ifreturn\returnfalse
95 \define@key{isodoc}{noreturn}   []{\returnfalse}
96 \define@key{isodoc}{returnaddress}{\def\returnaddress{\#1}}

```

### 8.1.4 Header

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

```

97 \define@key{isodoc}{header}    []{\headertrue}
98                                \newif\ifheader\headertrue
99 \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.

```

100 \define@key{isodoc}{bodyshift} {\advance\headerpos{\#1}
101 \newcount\headerpos\headerpos=98
102 \newcount\footerpos\footerpos=275
103 \newcount\subjectpos
104 \newcount\openingpos
105 \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.

```

106 \define@key{isodoc}{paymentorder} {\def\isodoc@paymentorder{\#1}}

```

```

107 \def\isodoc@paymentorder{term;bankname;bic;routingno;iban;accountno;%
108 accountname;payref;vatno;chamber}

```

### 8.1.5 Footer

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

```

109 \define@key{isodoc}{footorder} {\def\isodoc@footorder{\#1}}
110                                         \def\isodoc@footorder{website;phone;cellphone;email}
111 \define@key{isodoc}{footer} []{\footerttrue}
112             \newif\iffooter\footertfalse
113 \define@key{isodoc}{nofooter}[]{\footertfalse}

```

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

```

114 \define@key{isodoc}{areacode} {\def\areacode{\#1}}
115                                         \def\areacode{\Undefined{areacode}}
116 \define@key{isodoc}{phoneprefix}{\def\phoneprefix{\#1}}
117                                         \def\phoneprefix{\#0}
118 \define@key{isodoc}{phone} {\def\phone{\#1}}
119                                         \def\phone{\#1}
120                                         \def\@phone{\Undefined{phone}}
121 \define@key{isodoc}{cellphone} {\def\cellphone{\#1}}
122                                         \def\cellphone{\#1}
123                                         \def\@cellphone{\Undefined{cellphone}}
124 \define@key{isodoc}{fax} {\def\fax{\#1}}
125                                         \def\fax{\#1}
126                                         \def\@fax{\Undefined{fax}}
127 \define@key{isodoc}{website} {\def\website{\#1}}
128                                         \def\website{\#1}
129                                         \def\@website{\Undefined{website}}
130 \define@key{isodoc}{email} {\def@email{\#1}}
131                                         \def@email{\#1}
132                                         \def\@email{\Undefined{email}}
133 \define@key{isodoc}{creditorid} {\def\creditorid{\#1}}
134                                         \def\creditorid{\#1}
135                                         \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:

```

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

```

`foldleft` The folding mark is in the right margin, but it can be moved to the left margin with the  
`foldright` `foldleft` option, or, if made that the default in your style file, back to the right margin  
 with the `foldright` option:

```

138 \define@key{isodoc}{foldleft}[]{\xfold=9mm}
139             \newdimen\xfold\xfold=201mm
140 \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.

```

141 \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.

```

142 \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:

```

143 \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.

<code>ourref</code> <code>yourref</code> <code>yourletter</code>	<pre> 144 \define@key{isodoc}{ourref}  {\def\ourref{\#1}} 145                               \def\ourref{} 146 \define@key{isodoc}{yourref}  {\def\yourref{\#1}} 147                               \def\yourref{} 148 \define@key{isodoc}{yourletter}{\def\yourletter{\#1}} 149                               \def\yourletter{} </pre>
<code>date</code>	<p>The date must be entered in either of three formats: <code>yyyy-mm-dd</code>, <code>yyyymmdd</code> or the string <code>today</code> (<i>not</i> <code>\today!</code>). Here we check that a correct format is offered and that the values for <code>mm</code> and <code>dd</code> are in the range 1-12 and 1-31 respectively. The string <code>today</code> sets the date to today's date.</p> <pre> 150 \define@key{isodoc}{date}{\@isomakedate{\#1}} </pre>
<code>forcedate</code>	<p>If you know what you do you can substitute anything you like for the date by using the <code>forcedate</code> option instead of <code>date</code>:</p> <pre> 151 \define@key{isodoc}{forcedate}{\def\@forcedate{\#1}\def\@forcedate{}} </pre>
<code>subject</code>	<p>The subject is empty by default and will be typeset only if you give it a value.</p> <pre> 152 \define@key{isodoc}{subject}{\def\subject{\#1}} 153                               \def\subject{} </pre>
<code>opening</code> <code>openingcomma</code>	<p>The opening, something like «Dear Reader», is set by the <code>opening</code> option; the default is «Undefined opening». It is followed by a comma, unless the <code>openingcomma</code> has been used to set it to a different character, like a semicolon or an exclamation mark.</p> <pre> 154 \define@key{isodoc}{opening}      {\def\opening{\#1}} 155                               \def\opening{\Undefined{opening}} 156 \define@key{isodoc}{openingcomma}{\def\@openingcomma{\#1}} 157                               \def\@openingcomma{,} </pre>

### 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.

<code>closing</code>	<pre> 158 \define@key{isodoc}{closing}      {\def\closing{\#1}} 159                               \def\closing{\Undefined{closing}} 160 \define@key{isodoc}{closingcomma}{\def\@closingcomma{\#1}} 161                               \def\@closingcomma{,} 162 \define@key{isodoc}{closingskip}{\ClassError{isodoc}{% 163   The closingskip option has been removed 164   in version 1.04; instead set the signatureskip length, 165   preferably in a style file}} </pre>
<code>autograph</code>	<p>Some skipsBOOLEANS defined here to make it easier to redefine them in a style file. They precede the <code>closing</code>, <code>copyto</code> and <code>enclosers</code> and have no corresponding options (yet).</p>

<code>autograph</code>	<pre> 166 \newdimen\closingskip\closingskip=\baselineskip 167 \newdimen\signatureskip\signatureskip=2\baselineskip 168 \newdimen\copytoskip\copytoskip=\baselineskip 169 \newdimen\enclosureskip\enclosureskip=\baselineskip 170 \newif\ifencldown\encldownfalse </pre>
------------------------	---

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):

<code>autograph</code>	<pre> 171 \define@key{isodoc}{autograph}[2]{\def\autographversion{\#1}} 172                               \def\autographversion{0} </pre>
------------------------	---

signature	The signature, something like «John Letterwriter», is set by the signature option; the default is «Undefined signature».
	173 \define@key{isodoc}{signature}{\def\signature{\#1}} 174 \def\signature{\Undefined{signature}}
enclosures	Enclosures are set by the enclosures option. There are none by default.
	175 \define@key{isodoc}{enclosures} {\def\enclosures{\#1}} 176 \def\enclosures{}

copyto	Cc-ed names are set by the copyto option. There are none by default.
	177 \define@key{isodoc}{copyto} {\def\copyto{\#1}} 178 \def\copyto{}

### 8.1.9 Invoice specific data

term	Invoices need to state some specific data, like account data and term of payment:
bankname	179 \define@key{isodoc}{term}[30]{\def\term{\#1 \daystext}} 180 \def\term{}
bic	181 \define@key{isodoc}{accountno} {\def\accountno{\#1}} 182 \def\accountno{}
routingno	183 \define@key{isodoc}{mandateid} {\def\mandateid{\#1}} 184 \def\mandateid{}
iban	185 \define@key{isodoc}{routingno} {\def\routingno{\#1}} 186 \def\routingno{}
accountno	187 \define@key{isodoc}{bankname} {\def\bankname{\#1}} 188 \def\bankname{}
accountname	189 \define@key{isodoc}{accountname}{\def\accountname{\#1}} 190 \def\accountname{}
vatno	191 \define@key{isodoc}{iban} {\def\iban{\#1}} 192 \def\iban{}
chamber	193 \define@key{isodoc}{bic} {\def\bic{\#1}} 194 \def\bic{}
currency	195 \define@key{isodoc}{payref} {\def\payref{\#1}} 196 \def\payref{}
	197 \define@key{isodoc}{vatno} {\def\vatno{\#1}} 198 \def\vatno{}
	199 \define@key{isodoc}{chamber} {\def\chamber{\#1}} 200 \def\chamber{}
	201 \define@key{isodoc}{currency} {\def\currency{\#1}} 202 \def\currency{\EuroSymbol}

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

accept	
acceptaccount	203 \define@key{isodoc}{accept}[E05]{\def\accepttype{\#1}} 204 \newfont\ocrb{\ocrb10}
acceptaddress	205 }
acceptcents	206 \define@key{isodoc}{acceptaccount} {\def\acceptaccount{\#1}} 207 \def\acceptaccount{}
acceptdescription	208 \define@key{isodoc}{acceptaddress} {\def\acceptaddress{\#1}} 209 \def\acceptaddress{}
acceptdesc	210 \define@key{isodoc}{acceptcents} {\def\acceptcents{\#1}} 211 \def\acceptcents{\Undefined{}}
accepteuros	212 \define@key{isodoc}{acceptdescription}{\def\acceptdescription{\#1}} 213 \def\acceptdescription{}
acceptreference	214 \define@key{isodoc}{acceptdesc} {\def\acceptdesc{\#1}} 215 \def\acceptdesc{}
	216 \define@key{isodoc}{accepteuros} {\def\accepteuros{\#1}} 217 \def\accepteuros{\Undefined{}}
	218 \define@key{isodoc}{acceptreference} {\def\acceptreference{\#1}} 219 \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:

ref	description	L
	description	L

ref	euros cents	reference	C
eur ct	account		C
desc	address		L
desc	address		
desc	address		
220 \def\wacceptaccount{65}	\def\wacceptdesc{26}		
221 \def\xacceptaccount{75}	\def\xacceptdesc{7}		
222 \def\yacceptaccount{231.5}	\def\yacceptdesc{241}		
223 %			
224 \def\wacceptaddress{90}	\def\waccepteuros{32}		
225 \def\xacceptaddress{58}	\def\xaccepteuros{60}		
226 \def\yacceptaddress{241}	\def\yaccepteuros{219}		
227 %			
228 \def\wacceptcents{13}	\def\waccepteur{21}		
229 \def\xacceptcents{89}	\def\xaccepteur{14.4}		
230 \def\yacceptcents{219}	\def\yaccepteur{231.5}		
231 %			
232 \def\wacceptct{9}	\def\wacceptreference{55}		
233 \def\xacceptct{32}	\def\xacceptreference{125}		
234 \def\yacceptct{231.5}	\def\yacceptreference{219}		
235 %			
236 \def\wacceptdescription{100}	\def\wacceptref{30}		
237 \def\xacceptdescription{105}	\def\xacceptref{7}		
238 \def\yacceptdescription{200}	\def\yacceptref{212}		

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

239 \newdimen\acceptreferenceskip\acceptreferenceskip=5.15mm

## 8.2 User Macros

Some symbols taken from marvosym.sty:

```
240 \newcommand{\@isodocsym}{%
241   \fontfamily{mvs}\fontencoding{U}%
242   \fontseries{m}\fontshape{n}\selectfont
243 }
244 \def\EuroSymbol {{\@isodocsym\char164}}
245 \def\EUR0Symbol {{\@isodocsym\char99 }}
246 \def\LetterSymbol {{\@isodocsym\char66 }}
247 \def\EmailSymbol {{\@isodocsym\char107}}
248 \def\PhoneSymbol {{\@isodocsym\char84}}
249 \def\MobileSymbol {{\@isodocsym\char72}}
250 \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, it must have been defined with the macro \autograph, which defines an autograph from an image.<sup>10</sup>

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

---

<sup>10</sup>Thanks, Hans Hagen and Piet van Oostrum, for its definition

```

251 \newdimen\iso@outdent
252 \newdimen\iso@signpos
253 \newdimen\iso@down
254 \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.
255 \def\iso@isNum#1#2{%
256   \sbox{z}{\tempcnta=0#1\relax}
257   \ifdim\wd0>\z@\relax\ClassError{isodoc}%
258     {Argument #2 of autograph must be a number!}%
259     {You are probably using the oldstyle autograph arguments}\fi
260 }
261 \def\autograph#1#2#3#4#5#6{%
262   \iso@isNum{#3}{3}\iso@isNum{#4}{4}\iso@isNum{#5}{5}
263   \ifnum #1<2
264     \ClassError{isodoc}
265     {autograph #1 cannot be changed (first arg must be 2..9)}{}
266   \fi
267   \ifnum #1>9
268     \ClassError{isodoc}
269     {autograph #1 cannot be changed (first arg must be 2..9)}{}
270   \fi
271   \bgroup
272   \lccode`2='A \lccode`6='E
273   \lccode`3='B \lccode`7='F
274   \lccode`4='C \lccode`8='G
275   \lccode`5='D \lccode`9='H
276   \lowercase{\def\temp{#1}}%
277   \expandafter\egroup\expandafter\def\csname autograph\temp\endcsname{%
278     \vskip-2\baselineskip%
279     \setlength{\iso@down}{#2*#3/100-#2-2\baselineskip}
280     \setlength{\iso@outdent}{-#2*#5/100}
281     \setlength{\iso@signpos}{#2*(#4-#3)/100}
282     \hspace*{\iso@outdent}%
283       \raisebox{\iso@down}[0pt][0pt]{\includegraphics[height=#2]{#6}}%
284   \\\baselineskip%
285   \ifx\closing\empty\else
286     \closing@\closingcomma\\[\iso@signpos]\\[-2\baselineskip]
287   \fi%
288   \signature%
289 }
290 }

```

### 8.2.1 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.

```

\logo \newcommand{\zippedcity}{%
292   \ifcityzip\city\ \prezip\zip\else
293   \prezip\zip\ \city\fi
294 }
295 \newcommand{\logo}{\if@isodoclogo%
296   { \parskip=0pt\parindent=0pt
297     \begin{textblock}{140}[0,1](35,20)%
298       \textsf{\LARGE\company}\\[-1.7ex] % large company name
299       \rule{\hsize}{.3pt} % on top a rule
300     \end{textblock}
301   }
302   \isodoc@Tbox{140}{22}{35}{\noindent
303     \footnotesize\sffamily
304     \ifx\empty\logoaddress%
305       \ifx\who\empty\else\who\\\fi
306       \ifx\street\empty\else\street\\\fi

```

```

307      \zippedcity
308      \iffforeign\\country\fi
309      \else\logoaddress\fi
310  }\fi
311 }

\returnaddress
312 \def\returnaddress{%
313   \company\
314   \street\
315   \zippedcity
316   \iffforeign\\country\fi
317 }

\setupdocument
318 \newcommand{\setupdocument}[1]{
319   \setkeys{isodoc}{#1}
320 }

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

321 \newcount\@isoyear  \@isoyear=\year \year=0
322 \newcount\@isomonth \@isomonth=\month
323 \newcount\@isoday    \@isoday=\day
324 \def\@isomakedate#1{
325   \StrSubstitute[2]{#1}{-}{}[@iso@arg]
326   \IfStrEq{@iso@arg}{today}{
327     \year=\@isoyear
328     \month=\@isomonth
329     \day=\@isoday
330   }{\IfInteger{@iso@arg}{}{\ClassError{isodoc}{
331     Illegal date: not yyyyymmdd | yyyy-mm-dd | today}{}}
332   \StrLeft{@iso@arg}{4}[@iso]\year=\@iso
333   \StrRight{@iso@arg}{2}[@iso]\day=\@iso
334   \StrMid{@iso@arg}{5}{6}[@iso]\month=\@iso
335 }
336 \ifnum\month > 12 \ClassError{isodoc}{Illegal date: month>12}{}}
337 \ifnum\day    > 31 \ClassError{isodoc}{Illegal date: day>31}{}}
338 }

\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.
339 \def\date{%
340   \ifx@\forcedate\empty%
341     \ifnum\year=0\Undefined{date}\else\@isodate\fi
342   \else\@forcedate\fi
343 }

\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:
344 \newcommand{\isodoc@paymentbody}{%

```

```

345 \gdef\isodoc@body{}%
346 \ForEachX{;}{%
347   \setbox0=\hbox{\csname thislevelitem\endcsname}%
348   \ifdim\wd0=0pt\else%
349     \protected@xdef\isodoc@body{%
350       \isodoc@body
351       \csname thislevelitem text\endcsname: &
352       \csname thislevelitem\endcsname \protect\%
353     }%
354   \fi%
355 }{\isodoc@paymentorder}
356 \isodoc@body%
357 }
358 \def\paymentdata{%
359   \textbf{\paymentdatatext} \\
360   \begin{tabular}{@{}rl@{}}
361     \isodoc@paymentbody
362   \end{tabular}
363 }

```

paymentdata was earlier called accountdata; now obsolete:

```

364 \newcommand{\accountdata}{%
365   \ClassWarning{isodoc}{%
366     Instead of the obsolete command \protect\accountdata,
367     please use \protect\paymentdata.
368   }%
369   \paymentdata
370 }

```

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

```

371 \def\@isodocmp#1{%
372   \begin{minipage}[t]{\hsize}
373     \mbox{%
374       #1\\[-1.8ex]
375     \mbox{%
376       \end{minipage}
377     }%
378 \def\showkeys{%
379   \begin{longtable}{rl}
380     acceptaccount & \acceptaccount\\
381     acceptaddress & \acceptaddress\\
382     acceptcents & \acceptcents\\
383     acceptdesc & \@isodocmp{\acceptdesc}\\
384     acceptdescription & \acceptdescription\\
385     accepteuros & \accepteuros\\
386     acceptreference & \acceptreference\\
387     accountname & \accountname\\
388     accountno & \accountno\\
389     areacode & \areacode\\
390     bankname & \bankname\\
391     bic & \bic\\
392     cellphone & \cellphone\\
393     chamber & \chamber\\
394     city & \city\\
395     closing & \closing\\
396     company & \company\\
397     copyto & \@isodocmp{\copyto}\\
398     country & \country\\
399     countrycode & \countrycode\\
400     currency & \currency\\
401     email & \email\\
402     enclosures & \@isodocmp{\enclosures}\\
403     fax & \fax\\
404     iban & \iban\\
405     logoaddress & \logoaddress\\
406     opening & \opening\\

```

```

407         ourref & \ourref\\
408         payref & \payref\\
409         phone & \phone\\
410         phoneprefix & \phoneprefix\\
411         returnaddress & \@isodocmp{\returnaddress}\\
412             routingno & \routingno\\
413             signature & \@isodocmp{\signature}\\
414                 street & \street\\
415                 subject & \subject\\
416                     term & \term\\
417                     vatno & \vatno\\
418                     website & \website\\
419                     who & \who\\
420                     yourletter & \yourletter\\
421                     yourref & \yourref\\
422                     zip & \zip\\
423     \end{longtable}
424 }

hyperref is needed in all docs for the pdfinfo settings
425 \AtEndOfClass{%
426   \RequirePackage{hyperref}
427   \RequirePackage{memhfixc}
428 }

@isodocheadXX We define the heading parts here in order to allow for easy adaptations in style files.
429 \def \@isodocheadL{\totext:{} \toname{} (\date)}
430 \def \@isodocheadC{}
431 \def \@isodocheadR{\pagetext\ \thepage\ \oftext{}
432   \begin{NoHyper}\pageref{LastPageOf\thelettercount}\end{NoHyper}
433 }
434 \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}.
435 \def \@isodocfootL{}
436 \def \@isodocfootC{}
437 \def \@isodocfootR{}

\itable \itable inserts an invoice table; arg1 should be the rows of the table.
438 \def \isodoc@bara{\raisebox{-1ex}{\rule{0pt}{3ex}}}
439 \def \isodoc@barb{\rule{0pt}{2.7ex}}
440 \def \isodoc@barc{\rule{0pt}{1ex}}
441 \def \itable#1{\arrayrulewidth0.05em%
442   \ifvertical
443     \begin{tabularx}{\hsize}{@{}X|r@{}}
444       \sffamily\descriptiontext &
445       \sffamily \amounttext\,(\currency)\isodoc@bara\\\hline\\[-5.4ex]
446       \isodoc@barb #1%
447     \end{tabularx}
448   \else
449     \begin{tabularx}{\hsize}{@{}Xr@{}}
450       \sffamily\descriptiontext &
451       \sffamily \amounttext\,(\currency)\isodoc@bara\\\hline\\[-5.6ex]
452       \isodoc@barb #1%
453     \end{tabularx}
454   \fi
455 }

\iitem \iitem inserts an invoice item in the \itable. It inserts \\arg1 & % arg2:
456 \def \iitem#1#2{\#1\#2\ignorespaces}

\itotal \itotal inserts an invoice total in the \itable.
The optional argument replaces \totaltext.
457 \newcommand{\itotal}[2][\totaltext]{%
458   \isodoc@barc\\\cline{2-2}\#1&\textbf{\#2}\isodoc@barb
459 }

```

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 `LastPageOfn`, 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.

```
460 \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.

```
461 \newif\ifclosing\closingtrue
462 \newcount\footcount
463 \newcommand{\invoice}[2][]{%
464   \closingfalse
465   \ifx\payref\empty\def\payref{\ourref}\fi
466   \letter[#,,
467     opening={\scshape\Large\invoicetext},
468     openingcomma={},
469     closing={},
470     signature={}{}{\isodoc@Tbox{35}{127}{140}{\ignorespaces#2}}
471 }
```

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

```
472 \newcommand{\letter}[2][]{%
473   \clearpage{\pagestyle{empty}\cleardoublepage}
474   \setcounter{section}{0}
475   \setkeys{isodoc}{#1}
476   \def\isodoc@lead{\ifforeign+\areacode,\else\phoneprefix\fi}
477   \ifx\phone \empty\else\def@\phone {\isodoc@lead\phone}\fi
478   \ifx\cellphone \empty\else\def@\cellphone {\isodoc@lead\cellphone}\fi
479   \ifx\fax \empty\else\def@\fax {\isodoc@lead\fax}\fi
480   \ifx\website \empty\else\def@\website {\website}\fi
481   \ifx\email \empty\else\def@\email {\email}\fi
482   \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

```
483 \ifx\yourlettertext\undefined%
484   \ClassWarning{isodoc}{%
485     You did not use the language option; using the default: en-GB}
486   \isodoc@enGB%
487 \fi
488 \ifnum\value{lettercount}=0%
489   \hypersetup{pdftitle={letter to \toname\ dated \today},
490             pdfsubject={\subject},
491             pdfauthor={\who},
492             pdfcreator={LaTeX with isodoc class},
493   }
494 \fi
495 \addtocounter{lettercount}{1}
496 \setcounter{page}{1}
497 \setcounter{footnote}{0}
498 \fancyhf{}
499 \if@twoside
500   \fancyhead[LE,R0]{\@isodocheadbox{\@isodocheadR}}
501   \fancyhead[RE,L0]{\@isodocheadbox{\@isodocheadL}}
502   \fancyfoot[LE,R0]{\@isodocheadbox{\@isodocfootR}}
503   \fancyfoot[RE,L0]{\@isodocheadbox{\@isodocfootL}}
504 \else
505   \fancyhead[L]{\@isodocheadbox{\@isodocheadL}}
506   \fancyhead[R]{\@isodocheadbox{\@isodocheadR}}
507   \fancyfoot[L]{\@isodocheadbox{\@isodocfootL}}
```

```

508     \fancyfoot[R]{\@isodocheadbox{\@isodocfootR}}
509     \fi
510     \fancyhead[C]{\@isodocheadbox{\@isodocheadC}}
511     \fancyfoot[C]{\@isodocheadbox{\@isodocfootC}}
512     \logo
513 { \parskip=0pt\parindent=0pt
514   \begin{textblock}{\@addresswidth}[0,.5](\xaddress,\@addresscenter)%
515     \ifreturn
516       {\def\\{\unskip\enspace{\rmfamily\mdseries\textbullet}%
517         \enspace\ignorespaces}%
518         \sffamily\bfseries\scriptsize\returnaddress
519         }\\[-.8\baselineskip]
520         \rule{\hsize}{.2pt}\\
521       \fi
522       \toname\\toaddress
523   \end{textblock}
524 }
525 \subjectpos=\headerpos
526 \textskip=\headerpos\advance\textskip-14
527 \ifx\subject\empty\advance\textskip-10\else\advance\subjectpos10\fi
528 \openingpos=\subjectpos
529 \ifheader
530   \openingpos=\subjectpos\advance\openingpos12
531   \isodoc@Tbox{35}{\headerpos}{35}{\noindent
532     {\headfont\yourlettertext}\\
533     \yourletter
534   }
535   \isodoc@Tbox{70}{\headerpos}{35}{\noindent
536     {\headfont\yourreftext}\\
537     \raggedright\yourref
538   }
539   \isodoc@Tbox{105}{\headerpos}{35}{\noindent
540     {\headfont\ourreftext}\\
541     \raggedright\ourref
542   }
543   \isodoc@Tbox{140}{\headerpos}{35}{\noindent
544     {\headfont\datetext}\\
545     \date
546   }
547 \ifx\subject\empty\else%
548   \isodoc@Tbox{35}{\subjectpos}{140}{\noindent
549     \ifx\subjecttext\empty{\bfseries\subject}\else%
550       \begin{tabularx}{\hsize}{@{}l>{\raggedright}X@{}}
551         \headfont\subjecttext:&\subject
552       \end{tabularx}
553     \fi
554   }
555   \fi
556 \else
557   \advance\textskip-12
558 \fi
559 Create the footfields that occur in \isodoc@footorder, starting at the left;
560 \iffooter
561   \isodocFootFields
562 \fi
563 { \parskip=0pt\parindent=0pt
564   \begin{textblock*}{3mm}(\xfold,\yfold)%
565     {\color{markercolor}\rule{\hsize}{.2pt}}
566   \end{textblock*}
567 \ifx\undefined\accepttype\else\accept\fi
568 \noindent\isodoc@Tbox{35}{\openingpos}{140}{\opening@\openingcomma}
569 \vspace{\textskip mm}

```

```

570 \thispagestyle{empty}
571 \par\noindent\ignorespaces#2
572 \ifclosing{\vskip\closingskip\vskip-\baselineskip
573   \parindent=0pt\parskip=\baselineskip\noindent
574   \begin{minipage}[t]{\hsize}
575     \ifcase\autographversion
576       \par\closing{@closingcomma\\signature} % 0: closing on the next line
577       \or\par\closing{@closingcomma\\[\signatureskip]\signature} % 1: whiteskip
578       \or\autographA
579       \or\autographB
580       \or\autographC
581       \or\autographD
582       \or\autographE
583       \or\autographF
584       \or\autographG
585       \or\autographH
586     \else
587       \par\Undefined{autograph: \autographversion}\\
588     \fi
589   \end{minipage}
590 }\fi
591 \ifencdown\vspace*\fill\fi
592 \ifx\enclosures\empty\else{\[\enclosureskip]
593   \noindent
594   \begin{minipage}[t]{\hsize}
595     \setbox1=\vbox{\enclosures}%
596     \textbf{\ifdim\ht1>\baselineskip\enclosurestext\else\enclosuretext\fi:\\}
597     \enclosures
598   \end{minipage}
599 }\fi
600 \ifx\copyto\empty\else{\[\copytoskip]
601   \noindent
602   \begin{minipage}[t]{\hsize}
603     \textbf{\copytotext:\\}
604     \copyto
605   \end{minipage}
606 }\fi
607 \label{LastPageOf\thelettercount}
608 } % end letter

```

### 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.

```

609 \newcommand{\isodocFootFields}{%
610   \footcount=35
611   \enlargethispage{-10mm}
612   \ForEachX{}{%
613     \setbox0=\hbox{\csname @\thislevelitem\endcsname}
614     \ifdim\wd0=0pt\else
615       \isodoc@Tbox{\footcount}{\footerpos}{35}{\noindent
616         {\headfont\csname\thislevelitem text\endcsname}\\
617         \csname @\thislevelitem\endcsname
618       }
619     \fi
620     \advance\footcount35
621   }{\isodoc@footorder}
622 }

```

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:

```

623 \def\isodoc@Cbox#1#2#3#4{%
624   { \parskip=0pt\parindent=0pt

```

```

625      \begin{textblock}{#3}[.5,.5](#1,#2)%
626          \begin{center}
627              #4
628          \end{center}
629      \end{textblock}
630  }
631 }

\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:
632 \long\def\isodoc@Tbox#1#2#3#4{%
633 { \parskip0pt\parindent=0pt
634 \begin{textblock}{#3}(#1,#2)%
635 \begin{minipage}[t]{\hspace{#4}}
636 \noindent#4
637 \end{minipage}
638 \end{textblock}
639 }
640 }

\accept This macro will have a parameter if other accept forms will have to be programmed:
641 \def\accept{
642 \isodoc@Tbox{\xacceptdescription}
643 {\yacceptdescription}
644 {\wacceptdescription}
645 {\acceptdescription}
646 \isodoc@Tbox{\xacceptdesc}
647 {\yacceptdesc}
648 {\wacceptdesc}
649 {\acceptdesc}
650 \isodoc@Tbox{\xacceptaddress}
651 {\yacceptaddress}
652 {\wacceptaddress}
653 {\ifx\acceptaddress\empty\toname\\toaddress\else\acceptaddress\fi}
654 \isodoc@Cbox{\xacceptreference}
655 {\yacceptreference}
656 {\wacceptreference}
657 {\ocrb\acceptreference}
658 \isodoc@Tbox{\xacceptref}
659 {\yacceptref}
660 {\wacceptref}
661 {\baselineskip=\acceptreferenceskip\ocrb\acceptreference}
662 \isodoc@Cbox{\xaccepteuros}
663 {\yaccepteuros}
664 {\waccepteuros}
665 {\ocrb\accepteuros}
666 \isodoc@Cbox{\xacceptaccount}
667 {\yacceptaccount}
668 {\wacceptaccount}
669 {\ocrb\acceptaccount}
670 \isodoc@Cbox{\xacceptcents}
671 {\yacceptcents}
672 {\wacceptcents}
673 {\ocrb\acceptcents}
674 \isodoc@Cbox{\xaccepteur}
675 {\yaccepteur}
676 {\waccepteur}
677 {\ocrb\accepteuros}
678 \isodoc@Cbox{\xacceptct}
679 {\yacceptct}
680 {\wacceptct}
681 {\ocrb\acceptcents}
682 }

```

## 8.4 Translations

\isodoc@xxYY Catalan—contributed by Cristian Peraferrer:

```

683 \def\isodoc@caES{%
684   \gdef\amounttext      {Quantitat}
685   \gdef\copytotext     {CC}
686   \gdef\datetext       {Data}
687   \gdef\descriptiontext {Descripció}
688   \gdef\enclosurestext {Annexos}
689   \gdef\enclosuretext   {Annex}
690   \gdef\invoicetext    {factura}
691   \gdef\oftext          {de}
692   \gdef\ourreftext     {La nostra referència}
693   \gdef\pagetext        {Pàgina}
694   \gdef\subjecttext     {Assumpte}
695   \gdef\totaltext       {Total}
696   \gdef\totext          {A}
697   \gdef\yourlettertext  {La seva carta del}
698   \gdef\yourreftext     {La seva referència}

```

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

```

699  \gdef\accountnametext {a nom de}
700  \gdef\accountnotext   {núm.~de compte}
701  \gdef\banknametext   {banc}
702  \gdef\bictext         {\scshape bic}
703  \gdef\chambertext    {cambra de comerç}
704  \gdef\creditoridtext {creditor id}
705  \gdef\daystext        {dies}
706  \gdef\ibantext        {\scshape iban}
707  \gdef\mandateidtext  {mandate id}
708  \gdef\paymentdatatext {Detalls del pagament}
709  \gdef\payreftext      {referència}
710  \gdef\routingnotext  {nombre de ruta}
711  \gdef\termtext         {termini del pagament}
712  \gdef\vatnotext       {núm.~iva}
713  \gdef\vattext          {iva}

```

footer fields have lower case headers:

```

714  \gdef\cellphonetext  {mòbil}
715  \gdef\emailtext       {e-mail}
716  \gdef\faxtext         {fax}
717  \gdef\phonetext       {telèfon}
718  \gdef\websitetext    {web}
719  \gdef@isodate        {\number\day\space\ifcase\month\or
720    gener\or febrer\or març\or abril\or maig\or juny\or
721    juliol\or agost\or setembre\or octubre\or novembre\or desembre\fi
722    \space \number\year
723  }
724 }

```

German

```

725 \def\isodoc@deDE{%
726   \gdef\amounttext      {Betrag}
727   \gdef\copytotext     {Kopien an}
728   \gdef\datetext       {Datum}
729   \gdef\descriptiontext {Bezeichnung}
730   \gdef\enclosurestext {Anlagen}
731   \gdef\enclosuretext   {Anlage}
732   \gdef\invoicetext    {Rechnung}
733   \gdef\oftext          {von}
734   \gdef\ourreftext     {Unser Zeichen}
735   \gdef\pagetext        {Seite}
736   \gdef\subjecttext     {Betreff}
737   \gdef\totaltext       {Insgesamt}
738   \gdef\totext          {An}
739   \gdef\yourlettertext  {Ihr Brief vom}
740   \gdef\yourreftext     {Ihr Zeichen}

```

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

```

741  \gdef\accountnametext {Name}
742  \gdef\accountnotext   {Konto-Nr.}

```

```

743 \gdef\banknametext    {Bank}
744 \gdef\bictext        {\scshape bic}
745 \gdef\chambertext    {Register-Nr.}
746 \gdef\creditoridtext {Creditor ID}
747 \gdef\daystext       {Tage}
748 \gdef\ibantext       {\scshape iban}
749 \gdef\mandateidtext {Mandate ID}
750 \gdef\paymentdatatext {Zahlungsdaten}
751 \gdef\payreftext     {Referenz-Nr.}
752 \gdef\routingnotext  {\scshape blz}
753 \gdef\termtext       {Zahlungstermin}
754 \gdef\vatnotext      {USt-IdNr.}
755 \gdef\vattext         {MwSt}

```

footer fields have lower case headers:

```

756 \gdef\cellphonetext   {Handy}
757 \gdef\emailtext        {E-mail}
758 \gdef\faxtext          {Fax}
759 \gdef\phonetext         {Telefon}
760 \gdef\websitetext      {Webseite}
761 \gdef@isodate         {\number\day.\space\ifcase\month\or
762 Januar\or Februar\or März\or April\or Mai\or Juni\or
763 Juli\or August\or September\or Oktober\or November\or Dezember\fi
764 \space\number\year}
765 }

```

### British English

```

766 \def\isodoc@enGB{%
767 \gdef\amounttext      {Amount}
768 \gdef\copytotext      {Copy to}
769 \gdef\datetext        {Date}
770 \gdef\descriptiontext {Description}
771 \gdef\enclosurestext  {Enclosures}
772 \gdef\enclosuretext   {Enclosure}
773 \gdef\invoicetext    {invoice}
774 \gdef\oftext          {of}
775 \gdef\ourreftext      {Our reference}
776 \gdef\pagetext        {Page}
777 \gdef\subjecttext     {Subject}
778 \gdef\totaltext        {Total}
779 \gdef\totext          {To}
780 \gdef\yourlettertext  {Your letter of}
781 \gdef\yourreftext     {Your reference}

```

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

```

782 \gdef\accountnametext {in the name of}
783 \gdef\accountnotext   {account no.}
784 \gdef\banknametext    {bank}
785 \gdef\bictext        {\scshape bic}
786 \gdef\chambertext    {ch.comm.}
787 \gdef\creditoridtext {creditor id}
788 \gdef\daystext       {days}
789 \gdef\ibantext       {\scshape iban}
790 \gdef\mandateidtext  {mandate id}
791 \gdef\paymentdatatext {Payment details}
792 \gdef\payreftext      {reference}
793 \gdef\routingnotext  {sort code}
794 \gdef\termtext        {term of payment}
795 \gdef\vatnotext       {vat no.}
796 \gdef\vattext         {vat}

```

footer fields have lower case headers:

```

797 \gdef\cellphonetext   {cellphone}
798 \gdef\emailtext        {email}
799 \gdef\faxtext          {telefax}
800 \gdef\phonetext         {telephone}
801 \gdef\websitetext      {website}
802 \if@isodocardinalss

```

```

803   \gdef\@st{\textsuperscript{st}}
804   \gdef\@nd{\textsuperscript{nd}}
805   \gdef\@rd{\textsuperscript{rd}}
806   \gdef\@th{\textsuperscript{th}}
807 \else
808   \gdef\@st{st}
809   \gdef\@nd{nd}
810   \gdef\@rd{rd}
811   \gdef\@th{th}
812 \fi
813 \gdef\@isodate {\ifcase\day\or
814   1\@st\or 2\@nd\or 3\@rd\or 4\@th\or 5\@th\or
815   6\@th\or 7\@th\or 8\@th\or 9\@th\or 10\@th\or
816   11\@th\or 12\@th\or 13\@th\or 14\@th\or 15\@th\or
817   16\@th\or 17\@th\or 18\@th\or 19\@th\or 20\@th\or
818   21\@st\or 22\@nd\or 23\@rd\or 24\@th\or 25\@th\or
819   26\@th\or 27\@th\or 28\@th\or 29\@th\or 30\@th\or
820   31\@st\fi\space\ifcase\month\or
821   January\or February\or March\or April\or May\or June\or
822   July\or August\or September\or October\or November\or December\fi
823 \space \number\year}
824 }

```

### American English

```

825 \def\isodoc@enUS{%
826   \gdef\amounttext {Amount}
827   \gdef\copytotext {CC}
828   \gdef\datetext {Date}
829   \gdef\descriptiontext {Description}
830   \gdef\enclosurestext {Enclosures}
831   \gdef\enclosuretext {Enclosure}
832   \gdef\invoicetext {invoice}
833   \gdef\oftext {of}
834   \gdef\ourreftext {Our reference}
835   \gdef\pagetext {Page}
836   \gdef\subjecttext {Subject}
837   \gdef\totaltext {Total}
838   \gdef\totext {To}
839   \gdef\yourlettertext {Your letter of}
840   \gdef\yourreftext {Your reference}

```

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

```

841   \gdef\accountnametext {in the name of}
842   \gdef\accountnotext {account no.}
843   \gdef\banknametext {bank}
844   \gdef\bictext {\scshape bic}
845   \gdef\chambertext {ch.comm.}
846   \gdef\creditoridtext {creditor id}
847   \gdef\daystext {days}
848   \gdef\ibantext {\scshape iban}
849   \gdef\mandateidtext {mandate id}
850   \gdef\paymentdatatext {Payment details}
851   \gdef\payreftext {reference}
852   \gdef\routingnotext {routing no}
853   \gdef\termtext {term of payment}
854   \gdef\vatnotext {vat no.}
855   \gdef\vattext {vat}

```

footer fields have lower case headers:

```

856   \gdef\cellphonetext {cellphone}
857   \gdef\emailtext {email}
858   \gdef\faxtext {telefax}
859   \gdef\phonetext {telephone}
860   \gdef\websitetext {website}
861   \gdef\@isodate {\ifcase\month\or
862   January\or February\or March\or April\or May\or June\or
863   July\or August\or September\or October\or November\or December\fi

```

```
864     \space\number\day, \number\year}
865 }
```

Spanish—contributed by Cristian Peraferrer:

```
866 \def\isodoc@esES{%
867   \gdef\amounttext      {Cantidad}
868   \gdef\copytotext      {CC}
869   \gdef\datetext        {Fecha}
870   \gdef\descriptiontext {Descripción}
871   \gdef\enclosurestext  {Anexos}
872   \gdef\closuretext      {Anexo}
873   \gdef\invoicetext     {factura}
874   \gdef\oftext          {de}
875   \gdef\ourreftext      {Nuestra referencia}
876   \gdef\pagetext        {Página}
877   \gdef\subjecttext     {Asunto}
878   \gdef\totaltext        {Total}
879   \gdef\totext          {A}
880   \gdef\yourlettertext  {Su carta de}
881   \gdef\yourreftext     {Su referencia}
```

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

```
882   \gdef\accountnametext {a nombre de}
883   \gdef\accountnotext   {núm.~de cuenta}
884   \gdef\banknametext    {banco}
885   \gdef\bictext         {\scshape bic}
886   \gdef\chambertext    {cámara de comercio}
887   \gdef\creditoridtext {creditor id}
888   \gdef\daystext        {días}
889   \gdef\ibantext        {\scshape iban}
890   \gdef\mandateidtext  {mandate id}
891   \gdef\paymentdata{text {Detalles de pago}}
892   \gdef\payreftext      {referencia}
893   \gdef\routingnotext  {número de ruta}
894   \gdef\termtext        {plazo de pago}
895   \gdef\vatnotext       {núm.~iva}
896   \gdef\vattext         {iva}
```

footer fields have lower case headers:

```
897   \gdef\cellphonetext  {móvil}
898   \gdef\emailtext       {e-mail}
899   \gdef\faxtext         {fax}
900   \gdef\phonetext       {teléfono}
901   \gdef\websitetext    {web}
902   \gdef@isodate        {\number\day\space\ifcase\month\or
903     enero\or febrero\or marzo\or abril\or mayo\or junio\or
904     julio\or agosto\or septiembre\or octubre\or noviembre\or diciembre\fi
905     \space \number\year}
906 }
907 \def\openingcomma      {:}
908 }
```

French

```
909 \def\isodoc@frFR{%
910   \gdef\amounttext      {Montant}
911   \gdef\copytotext      {Copie à}
912   \gdef\datetext        {Date}
913   \gdef\descriptiontext {Description}
914   \gdef\enclosurestext  {Pièces jointes}
915   \gdef\closuretext      {Pièce jointe}
916   \gdef\invoicetext     {facture}
917   \gdef\oftext          {de}
918   \gdef\ourreftext      {Nos références}
919   \gdef\pagetext        {Page}
920   \gdef\subjecttext     {Objet}
921   \gdef\totaltext        {Total}
922   \gdef\totext          {À l'attention de}
923   \gdef\yourlettertext  {Votre lettre du}
```

```

924 \gdef\yourreftext {Vos références}
payment data entries, all lower case, except the header:
925 \gdef\accountnametext {au nom de}
926 \gdef\accountnotext {no.~compte}
927 \gdef\banknametext {banque}
928 \gdef\bictext {\scshape bic}
929 \gdef\chambertext {c.c.i.}
930 \gdef\creditoridtext {creditor id}
931 \gdef\daystext {jours}
932 \gdef\ibantext {\scshape iban}
933 \gdef\mandateidtext {mandate id}
934 \gdef\paymentdatatext {Détails de paiement}
935 \gdef\payreftext {référence}
936 \gdef\routingnotext {numéro d'acheminement}
937 \gdef\termtext {terme}
938 \gdef\vatnotext {no.~t.v.a.}
939 \gdef\vattext {t.v.a.}

```

footer fields have lower case headers:

```

940 \gdef\cellphonetext {portable}
941 \gdef\emailtext {email}
942 \gdef\faxtext {téléfax}
943 \gdef\phonetext {téléphone}
944 \gdef\websitetext {site web}
945 \gdef@isodate {\number\day\ifnum\day=1${er}\fi\space\ifcase\month\or
946 janvier\or février\or mars\or avril\or mai\or juin\or
947 juillet\or août\or septembre\or octobre\or
948 novembre\or décembre\fi \space \number\year}
949 }

```

Italian—contributed by Walter Giocoso:

```

950 \def\isodoc@itIT{%
951 \gdef\amounttext {Prezzo}
952 \gdef\copytotext {Per conoscenza a}
953 \gdef\datetext {Data}
954 \gdef\descriptiontext {Descrizione}
955 \gdef\enclosurestext {Allegati}
956 \gdef\closurestext {Allegato}
957 \gdef\invoicetext {fattura}
958 \gdef\oftext {di}
959 \gdef\ourreftext {Nostro riferimento}
960 \gdef\pagetext {Pagina}
961 \gdef\subjecttext {Oggetto}
962 \gdef\totaltext {Totale}
963 \gdef\totext {All'attenzione di}
964 \gdef\yourlettertext {Vostra lettera del}
965 \gdef\yourreftext {Vostro riferimento}

```

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

```

966 \gdef\accountnametext {intestato a}
967 \gdef\accountnotext {n°~del conto}
968 \gdef\banknametext {banca}
969 \gdef\bictext {\scshape bic}
970 \gdef\chambertext {}
971 \gdef\creditoridtext {creditor id}
972 \gdef\daystext {giorni}
973 \gdef\ibantext {\scshape iban}
974 \gdef\mandateidtext {mandate id}
975 \gdef\paymentdatatext {Dettagli di pagamento}
976 \gdef\payreftext {riferimento}
977 \gdef\routingnotext {numero di routing}
978 \gdef\termtext {scadenza}
979 \gdef\vatnotext {partita i.v.a.}
980 \gdef\vattext {i.v.a.}

```

footer fields have lower case headers:

```

981 \gdef\cellphonetext {cellulare}

```

```

982 \gdef\emailtext      {e-mail}
983 \gdef\faxtext        {fax}
984 \gdef\phonetext      {telefono}
985 \gdef\websitetext    {sito web}
986 \gdef@isodate       {\number\day\ifnum\day=1\fi
987     ~\ifcase\month\or
988     Gennaio\or Febbraio\or Marzo\or Aprile\or Maggio\or Giugno\or
989     Luglio\or Agosto\or Settembre\or Ottobre\or Novembre\or Dicembre\fi
990     \space \number\year}
991 }

```

Norwegian—contributed by Sveinung Heggen:

```

992 \def\isodoc@nbN0{%
993   \gdef\amounttext      {Beløp}
994   \gdef\copytotext      {Kopi til}
995   \gdef\datetext        {Dato}
996   \gdef\descriptiontext {Beskrivelse}
997   \gdef\enclosurestext  {Vedlegg}
998   \gdef\enclosuretext   {Vedlegg}
999   \gdef\invoicetext    {faktura}
1000  \gdef\oftext          {av}
1001  \gdef\ourreftext     {Vår ref}
1002  \gdef\pagetext       {Side}
1003  \gdef\subjecttext    {Vedr}
1004  \gdef\totaltext      {Total}
1005  \gdef\totext         {Til}
1006  \gdef\yourlettertext {Deres brev av}
1007  \gdef\yourreftext    {Deres ref}

```

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

```

1008 \gdef\accountnametext {til}
1009 \gdef\accountnotext   {faktura nr}
1010 \gdef\banknametext   {bank}
1011 \gdef\bictext        {\scshape bic}
1012 \gdef\chambertext    {}
1013 \gdef\creditoridtext {creditor id}
1014 \gdef\daystext        {dager}
1015 \gdef\iban{text}     {\scshape iban}
1016 \gdef\mandateidtext  {mandate id}
1017 \gdef\paymentdatatext {Betalingsdetaljer}
1018 \gdef\payreftext      {referanse}
1019 \gdef\routingnotext  {routing-nummer}
1020 \gdef\termtext         {betalingsfrist}
1021 \gdef\vatnotext       {org.-nr.}
1022 \gdef\vattext          {mva}

```

footer fields have lower case headers:

```

1023 \gdef\cellphonetext  {mobil}
1024 \gdef\emailtext       {e-post}
1025 \gdef\faxtext        {telefaks}
1026 \gdef\phonetext       {telefon}
1027 \gdef\websitetext     {hjemmeside}
1028 \gdef@isodate        {\number\day.\space\ifcase\month\or
1029     januar\or februar\or mars\or april\or mai\or juni\or
1030     juli\or august\or september\or oktober\or november\or desember\fi
1031     \space \number\year}
1032 }

```

Belgian Dutch—contributed by Serge Stroobandt:

```

1033 \def\isodoc@nlBE{%
1034   \gdef\amounttext      {Bedrag}
1035   \gdef\copytotext      {Kopie aan}
1036   \gdef\datetext        {Datum}
1037   \gdef\descriptiontext {Omschrijving}
1038   \gdef\enclosurestext  {Bijlagen}
1039   \gdef\enclosuretext   {Bijlage}
1040   \gdef\invoicetext    {factuur}
1041   \gdef\oftext          {van}

```

```

1042 \gdef\ourreftext      {Ons kenmerk}
1043 \gdef\pagetext        {Pagina}
1044 \gdef\subjecttext     {Betreft}
1045 \gdef\totaltext       {Totaal}
1046 \gdef\totext          {Aan}
1047 \gdef\yourlettertext  {Uw brief van}
1048 \gdef\yourreftext     {Uw kenmerk}

```

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

```

1049 \gdef\accountnametext {op naam van}
1050 \gdef\accountnotext   {rekeningnummer}
1051 \gdef\banknametext    {bank}
1052 \gdef\bictext         {\scshape bic}
1053 \gdef\chambertext    {ondernemingsnummer}
1054 \gdef\creditoridtext {incassant id}
1055 \gdef\daystext        {dagen}
1056 \gdef\ibantext        {\scshape iban}
1057 \gdef\mandateidtext  {kenmerk machtiging}
1058 \gdef\paymentdatatext {Betaalgegevens}
1059 \gdef\payreftext      {kenmerk}
1060 \gdef\routingnotext   {routenummer}
1061 \gdef\termtext         {betalingstermijn}
1062 \gdef\vatnotext       {ondernemingsnummer}
1063 \gdef\vattext          {btw}

```

footer fields have lower case headers:

```

1064 \gdef\cellphonetext   {mobiel}
1065 \gdef\mailto          {e-mail}
1066 \gdef\faxtext         {fax}
1067 \gdef\phonetext        {telefoon}
1068 \gdef\websitetext     {webstek}
1069 \gdef@isodate        {\number\day\space\ifcase\month\or
1070   januari\or februari\or maart\or april\or mei\or juni\or juli\or
1071   augustus\or september\or oktober\or november\or december\fi
1072   \space \number\year}
1073 }

```

### Dutch

```

1074 \def\isodoc@nlNL{%
1075 \gdef\amounttext       {Bedrag}
1076 \gdef\copytotext      {Kopie aan}
1077 \gdef\datetext         {Datum}
1078 \gdef\descriptiontext {Omschrijving}
1079 \gdef\enclosurestext  {Bijlagen}
1080 \gdef\enclosuretext    {Bijlage}
1081 \gdef\invoicetext     {\scshape rekening}
1082 \gdef\oftext           {van}
1083 \gdef\ourreftext       {Ons kenmerk}
1084 \gdef\pagetext         {Bladnummer}
1085 \gdef\subjecttext      {Onderwerp}
1086 \gdef\totaltext        {Totaal}
1087 \gdef\totext           {Aan}
1088 \gdef\yourlettertext   {Uw brief van}
1089 \gdef\yourreftext      {Uw kenmerk}

```

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

```

1090 \gdef\accountnametext {ten name van}
1091 \gdef\accountnotext   {rekeningnummer}
1092 \gdef\banknametext    {bank}
1093 \gdef\bictext         {\scshape bic}
1094 \gdef\chambertext    {kvk}
1095 \gdef\creditoridtext {incassant id}
1096 \gdef\daystext        {dagen}
1097 \gdef\ibantext        {\scshape iban}
1098 \gdef\mandateidtext  {kenmerk machtiging}
1099 \gdef\paymentdatatext {Betaalgegevens}
1100 \gdef\payreftext      {kenmerk}
1101 \gdef\routingnotext   {banknummer}

```

```

1102 \gdef\termtext      {betalingstermijn}
1103 \gdef\vatnotext    {btwnummer}
1104 \gdef\vattext      {btw}

  footer fields have lower case headers:

1105 \gdef\cellphonetext {mobiel}
1106 \gdef\emailtext     {e-mail}
1107 \gdef\faxtext       {fax}
1108 \gdef\phonetext     {telefoon}
1109 \gdef\websitetext   {webstek}
1110 \gdef@isodate      {\number\day\space\ifcase\month\or
1111     januari\or februari\or maart\or april\or mei\or juni\or juli\or
1112     augustus\or september\or oktober\or november\or december\fi
1113     \space \number\year}
1114 }

```

Serbian–contributed by Zoran T. Filipovic:

```

1115 \def\isodoc@srs{%
1116 \gdef\amounttext    {Iznos}
1117 \gdef\copytotext    {Kopije}
1118 \gdef\datetext      {Datum}
1119 \gdef\descriptiontext {Opis}
1120 \gdef\enclosurestext {Prilozi}
1121 \gdef\enclosuretext  {Prilog}
1122 \gdef\invoicetext   {faktura}
1123 \gdef\oftext        {od}
1124 \gdef\ourreftext    {Naš broj}
1125 \gdef\pagetext      {Strana}
1126 \gdef\subjecttext   {Predmet}
1127 \gdef\totaltext      {Ukupno}
1128 \gdef\totext        {U}
1129 \gdef\yourlettertext {Vaše pismo od}
1130 \gdef\yourreftext   {Vaš broj}

```

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

```

1131 \gdef\accountnametext {na ime}
1132 \gdef\accountnotext   {račun br.}
1133 \gdef\banknametext   {banka}
1134 \gdef\bictext         {\scshape bic}
1135 \gdef\chambertext    {spisak br.}
1136 \gdef\creditoridtext {creditor id}
1137 \gdef\daystext        {dana}
1138 \gdef\iban{text}      {\scshape iban}
1139 \gdef\mandateidtext  {mandate id}
1140 \gdef\paymentdatatext {Podaci o bankarskom sektoru}
1141 \gdef\payreftext      {dokumet br.}
1142 \gdef\routingnotext  {blz}
1143 \gdef\termtext        {rok plaćanja}
1144 \gdef\vatnotext       {porez br.}
1145 \gdef\vattext         {pdv}

```

footer fields have lower case headers:

```

1146 \gdef\cellphonetext {mobilni}
1147 \gdef\emailtext     {email}
1148 \gdef\faxtext       {telefax}
1149 \gdef\phonetext     {telefon}
1150 \gdef\websitetext   {website}
1151 \gdef@isodate      {\number\day.\~\ifcase\month\or
1152     Januar\or Februar\or Mart\or April\or Maj\or Jun\or
1153     Jul\or Avgust\or Septembar\or Oktobar\or Novembar\or Decembar\fi
1154     \space\number\year}
1155 }

```

Swedish–contributed by Joakim Verona:

```

1156 \def\isodoc@svse{%
1157 \gdef\amounttext    {Summa}
1158 \gdef\copytotext    {CC}
1159 \gdef\datetext      {Datum}

```

```

1160 \gdef\descriptiontext {Beskrivning}
1161 \gdef\enclosurestext {Bifogat}
1162 \gdef\enclosuretext {Bifogat}
1163 \gdef\invoicetext {Faktura}
1164 \gdef\oftext {av}
1165 \gdef\ourreftext {Vår referens}
1166 \gdef\pagetext {Sida}
1167 \gdef\subjecttext {Ärende}
1168 \gdef\totaltext {Total}
1169 \gdef\totext {Till}
1170 \gdef\yourlettertext {Ert~brev}
1171 \gdef\yourreftext {Er~Referens}

payment data entries, all lower case, except the header:
1172 \gdef\accountnametext {kontoägare}
1173 \gdef\accountnotext {kontonummer}
1174 \gdef\banknametext {bank}
1175 \gdef\bictext {\scshape bic}
1176 \gdef\chambertext {handelskammare}
1177 \gdef\creditoridtext {creditor id}
1178 \gdef\daystext {dagar}
1179 \gdef\ibantext {\scshape iban}
1180 \gdef\mandateidtext {mandate id}
1181 \gdef\paymentdatatext {Betalningsdetaljer}
1182 \gdef\payreftext {faktura}
1183 \gdef\routingnotext {routing no}
1184 \gdef\termtext {betalningsvillkor}
1185 \gdef\vatnotext {org.~nr}
1186 \gdef\vattext {moms}

footer fields have lower case headers:
1187 \gdef\cellphonetext {mobil}
1188 \gdef\emailtext {e-mail}
1189 \gdef\faxtext {telefax}
1190 \gdef\phonetext {telefon}
1191 \gdef\websitetext {web}
1192 \gdef@isodate {\number\day\space~\ifcase\month\or
1193 januari\or februari\or mars\or april\or maj\or juni\or
1194 juli\or augusti\or september\or oktober\or november\or december\fi
1195 \space\number\year}
1196 }
1197 
```

## 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	- new option closingcomma - subject uses full textwidth - using foreach package for footfields - removed some unwanted whitespace . . . . .	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 <i>only</i> 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			
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 subjecttext generates bold subject line (habit in de-DE) - page headings forced in one line	1		

- more instructions for first line of address	
- phone number prefix +nn\, instead of +nn- . . . . .	1
<b>v1.02</b>	
General: - installing in correct dirs, so texdoc finds the doc	
- more comment . . . . .	1
<b>v1.03</b>	
General: - added logo and nologo options	
- changed definitions for fancy headings and footings to allow for easy adaptation in style files. . . . .	1
<b>v1.04</b>	
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
<b>v1.05</b>	
General: - README and inst script reorganized . . . . .	1
<b>v1.06</b>	
General: - bug causing "No line here to end" error	
- font and footskip warnings removed . . . . .	1
<b>v1.07</b>	
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
<b>v1.08</b>	
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
<b>v1.09</b>	
General: - documentation: translations are in macros, not files . . . . .	1
<b>v1.10</b>	
General: - honor a few luatex modifications . . . . .	1
<b>v1.11</b>	
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
<b>v1.12</b>	
General: - For some reason letter body now needs to start with par command, can't find out which package causes this. - isodoc.ins syntax didn't work, probably because of changes in luatex? - small changes because of move from bitbucket to github . . . . .	1
<b>v1.13</b>	
General: - Use memoir with article option for better table numbering etc.	
- Check validity of language option argument - Adapted to changes in new LaTeX version (headers disappeared) . . . . .	1
<b>v1.14</b>	
General: - Use memoir with article option (got lost in version 1.13) . . . . .	1

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