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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*This document corresponds to isodoc v0.7, dated 2009/11/16.

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1 Introduction

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

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

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

The general setup of a document producing one or more letters is (see figures 1–3, page 11–12, 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 15):

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

2 Options

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

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

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

`\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

Currently only a few 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 keywords below set the language, English is used by default.

`dutch`	Set language to Dutch,
`english`	English,
`german`	German,
`american`	American,
`norwegian`	Norwegian,
`french`	or French.
`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. In the `\accountdata` command, it causes IBAN en BIC code to be included.

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`, `prezip`, `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.

`company = ...`	Your company name as it should appear in the logo (if you use the default logo) and in the return address (where it may get overridden by the `returnaddress` keyword.) For private documents, use your name or nickname here.
`logoaddress = ...`	Contact person's data; use \\ commands for line breaks. If you don't define this option, the data will be constructed from the following options.
`who = ...`	Contact person's name; probably your own name.
`street = ...`	Street in the sender's address.
`city = ...`	City in the sender's address.
`zip = ...`	Zip in the sender's address.
`cityzip`	Place zip *after* city, instead of before it (the default).
`country = ...`	Country in the sender's address. Only used if `foreign` key was used.
`countrycode = ...`	Sender's country code. For The Netherlands: NL
`areacode = ...`	Sender's area code. For The Netherlands: 31

Address window

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

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

Header fields

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

`bodyshift = ...`	The header starts 98mm from the top of the paper, but it can be shifted with the `bodyshift` option.
`[no]header`	The `noheader` option disables all header fields, the `header` option re-enables them (`header` is the default.)
`yourletter = ...`	first field in the header: the date of the letter this document is reaction on; empty by default.
`yourref = ...`	second field in the header: addressee's reference of the letter this document is reaction on; empty by default.
`ourref = ...`	third field in the header: your own reference for this document.
`date = ...`	fourth field of the header. The argument must have the form `yyyymmdd` or `yyyy-mm-dd`; it will be translated into a date like "May 3, 2006" if the document language is English, or into its translation in the actual language. The default value is 'Undefined date', i.e. 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` 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, over the width of the first, second and half of the third fields.

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

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

`closing = ...` Regards

`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. Change with the `closingskip` key.
- 2–9: inserts one of eight autograph images which, with the `\autograph` command, may have been defined in the style file.

`enclosures = ...` This keyword can be used to add a note, at the end of the document, which starts with **Enclosure:** followed by the value of the keyword. Multiple enclosures can be separated with \\ commands. If those are found, the starting text will be **Enclosures:**.

`closingskip = ...` white space between signature and closing. The default is `2\baselineskip`.

Footer fields
Footer fields are shown in the order in which they appear below; they are empty by default, and empty fields are not displayed.

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

`phoneprefix` prefix for phone numbers. The default is '0'; will be changed into '+<areacode>-' if the `foreign` option is used.

`phone = ...` if not empty, prints 'phone' in the first field of the page footer, with the contents under it, prefixed with a 0 or, if the `foreign` option was used, the areacode (set with the `areacode` option.) Telephone numbers should thus be entered without a prefix.

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

`fax = ...` fax...

`email = ...` email...

`website = ...` and website.

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

`nofold` Disable folding marks.

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

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

`fold2` Folding mark at about halfway, set for tight fitting into a 220x162 mm envelope, with a tolerance of 2 mm at both sides.

`fold3` Folding mark at about one third from the top, set for tight fitting into a 220x110 mm envelope, with a tolerance of 1.5 mm at both sides.

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

Payment data
In invoices you probably want to make clear where you want your debtor to transfer his money to. You can do so by calling the `\accountdata` command, which generates a little table containing these data. The contents of this table can be defined with the following keywords:

`term = ...`	Payment term in days; default is 30.
`currency = ...`	Currency; default is euro.
`accountno = ...`	Your bank account number.
`routingno = ...`	Your bank's routing number. Will not be cited if undefined.
`accountname = ...`	Your bank account's ascription. Will not be cited if undefined.
`iban = ...`	Your account's IBAN...
`bic = ...`	and BIC code; IBAN and BIC are only reported in invoices to foreign customers—see the `foreign` keyword.
`vatno = ...`	Your VAT reference number, not yet used.
`chamber = ...`	Your Chamber of Commerce subscription number, not yet used.

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.
`fontpackage = ...`	The default font is Latin Modern (`fontpackage = lmodern`), but with the `fontpackage` keyword you can select another package, like `txfonts` or `osf-txfonts`.
`shift = ...`	The many textpositions 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.

3 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:[5]

accept	addresswidth	currency	ourref	website
acceptaccount	areacode	email	phone	who
acceptaddress	autograph	enclosures	phoneprefix	yourletter
acceptcents	bic	fax	returnaddress	yourref
acceptdesc	cellphone	fontpackage	rightaddress	zip
acceptdescription	chamber	forcedate	routingno	
accepteuros	city	iban	signature	
acceptreference	closing	leftaddress	street	
accountname	company	logoaddress	subject	
accountno	country	opening	term	
addresscenter	countrycode	openingcomma	vatno	

So you could write in your letter: "please send me the money on my bank account: `\accountno\` as soon as possible."

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

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

`\invoice` The `\invoice` command is essentially the same as the `\letter` command, except that the opening is always "INVOICE", and the content (argument 2) is largely composed using the `\itable`, `\iitem`, `\itotal`, and `\accountdata` 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 (€)'. The single argument of `\itable` should contain the contents of the table and is of the form:

```
item 1 & amount 1\NN
item 2 & amount 2\NN
...
item n & amount n \NN
\cmidrule[.05em]{2-2}
Total  & amount \NN
```

However, the next two commands may be used to enter these data more cleanly:

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

`\itotal` The `\itotal{amount}` command (`itotal` stands for Invoice total) is equivalent to writing: `\cmidrule[.05em]{2-2} Total & amount \NN`, with the additional advantage that the word 'Total' will be replaced with its equivalent in the current language. Thus, the argument to the `\itable` command show above can also be written:

```
\iitem{item 1}{amount 1}
\iitem{item 2}{amount 2}
```

[5] Note for developers: the table lines below can be generated with a ruby script listkeys (included in the distribution): `listkeys show`

```
...
\iitem{item n}{amount n}
\total{amount}
```

\accountdata The \accountdata 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 accountno, accountname, routingno, iban, and bic. The latter two are only included if the foreign option was used.

\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. One of these autographs will be drawn between the closing (*Best regards*) and the signature (*Betty*) if you use the autograph option with a value from 2 through 9. \autograph has 7 arguments:

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

The arguments 3–6 must be dimensions, and for a given autograph image should be inferred by inspecting the image with an image manipulation program like, for example, the gimp. In the lower left corner of the gimp window, select the units of length, move the pointer to the positions where you want margin, closing, and signature and to the bottom of the image, read the x, y, y and y positions respectively and use those for the argument 3, 4, 5, and 6.

\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 14.

4 Usage: letters

Usage of the class is best explained by example.

4.1 A simple letter

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

```
\documentclass[11pt]{isodoc}
\usepackage{mystyle}
\definecolor{headcolor}{gray}{.5}
\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,
   subject  = An example letter using the isodoc class,
 autograph  = 2,
}

\begin{document}
\letter{This letter was composed using the \LaTeX{} isodoc class.
  \par\input{thuan} % for some body
```

The Letter Company

Wybo Dekker
Deilsedijk 60
4158 CH Deil

Letter Cy • Deilsedijk 60 • Deil

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

Your letter of	Your reference	Our reference	Date
		1029	Undefined date

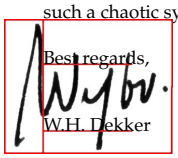
Subject: An example letter using the isodoc class

L.S.,

This letter was composed using the LaTeX isodoc class.

Had our solar system included two suns, the problem would have involved three bodies (the two suns and each planet), and chaos would have been immediately obvious. Planets would have had erratic and unpredictable orbits, and creatures living on one of these planets would never have been able to percieve the slightest harmony. Nor would it have occurred to them that the universe might be ruled by laws and that it is up to man's intellect to discover them. Besides, it is not at all obvious that life and conscience could even emerge in such a chaotic system.

Best regards,



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Enclosures:
isodoc documentation
LPPL documentation

website	telephone	cellphone	email
www.servalys.nl	087-87 48 496	06-15 49 20 70	wybo@servalys.nl

Figure 1: Minimal letter example

```
}
\end{document}
```

This source essentially shows three items:

1. the inclusion of a package `mystyle`; 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 `mystyle` package plays its part. Here is an example of such a style file:

```
\NeedsTeXFormat{LaTeX2e}[1999/12/01]
\ProvidesPackage{mystyle}
  [2006/04/04 v1.0 Letter Company style file for isodoc]

\setupdocument{return,footer,fold3,
  fontpackage     = pxfonts,
  autograph       = 0,
  company         = The Letter Company,
  returnaddress   = Letter Cy\\Deilsedijk 60\\Deil,
  who             = Wybo Dekker,
  street          = Deilsedijk 60,
  city            = Deil,
  zip             = 4158 CH,
  country         = The Netherlands,
  countrycode     = NL,
  areacode        = 31,
  phone           = {87-87\,48\,496},
  cellphone       = {6-15\,49\,20\,70},
  fax             = {},
  website         = www.servalys.nl,
  email           = wybo@servalys.nl,
  accountno       = {3040\,46221},
  iban            = nl61pstb0006238747,
  bic             = pstbnl21,
  vatno           = 28750482B01,
  chamber         = 11023220,
  opening         = L.S.,
  closing         = Best regards,
  signature       = W.H.~Dekker
}
\graphicspath{{./graphics/}}
\autograph{2}{.30}{75bp}{87bp}{216bp}{261bp}{signw_marked}
\endinput
```

So in the style file, too, `\setupdocument` is used to register information that will 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

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Wybo Dekker
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4158 CH Deil

Uw brief van	Uw kenmerk	Ons kenmerk	Datum
May 12	MAPS #34	1029	2 januari 2010

Onderwerp: Sample letter with the isodoc class

Beste Wybo,

This is an example of a letter made with the isodoc class. Note that the date was set to 'today', so the date above the letter depends upon the day of compilation.

The picture in the logo was designed by Pieter Weltevrede. The text[1] has no meaning, its only goal is to get a long letter.

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

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

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

- de zetbreedte (regellengte): de breedte van een tekstblok of kolom. De typograaf let daarbij op het maximum aantal tekens of woorden per regel. Bij een tekst met te lange regels moet het oog van de lezer namelijk een te grote afstandssprong maken van het eind van de regel naar het begin van de volgende. In het algemeen worden maxima gehanteerd van gemiddeld ca. 85 tekens (inclucief spaties en leestekens) of van gemiddeld twaalf woorden.

- de diverse lettergroottes (corpsen) en -soorten Door een combinatie daarvan (naast o.a. kleurgebruik) kan de typograaf de diverse tekstelementen visueel 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

[1] gathered from the TEX-distribution

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

letterfamilies, die dan bijv. als extra lettersoort vet-cursief, halfvet, extra vet, versmald en verbreed hebben.

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

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

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

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

Kind regards,

Wybo Dekker

Bijlage:
Isodoc documentatie

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

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

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 `autograph=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 *outdent*, *closing*, and *signature* 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.

4.2 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 (`logostyle.sty`):

```
\RequirePackage{ucs}
\RequirePackage[utf8x]{inputenc}
\setupdocument{
  nofooter,fold2,autograph=1,dutch,
  company         = The Shiva Shakti Foundation,
  who             = Wybo Dekker,
  street          = Deilsedijk 60,
  city            = Deil,
  zip             = 4158 CH,
  country         = The Netherlands,
  countrycode     = IN,
  areacode        = 31,
  phone           = {87-87\,48\,496},
  cellphone       = {6-15\,49\,20\,70},
  fax             = {},
  website         = www.servalys.nl,
  email           = wybo@servalys.nl,
  accountno       = {3040\,46221},
  iban            = nl61pstb0006238747,
  bic             = pstbnl21,
  addresscenter   = 70,
  rightaddress
}
\autograph{2}{.20}{75bp}{47bp}{238bp}{261bp}{signblue}

\definecolor{headcolor}{rgb}{0.42, 0.57, 0.14} % goldenrod2
\definecolor{shivablue}{rgb}{.14,.33,.43}
\definecolor{shivaback}{rgb}{.78,.89,.68}
\pdfmapfile{=chopinsc.map}
\newcommand{\chopinscript}{\fontfamily{chopinscript}\selectfont}
\DeclareFontFamily{T1}{chopinscript}{}
\DeclareFontShape{T1}{chopinscript}{m}{n}{ <-> chopinsc}{}
```

```
\graphicspath{{./graphics/}}

\renewcommand{\logo}{
  \pagecolor{shivaback}
  \begin{textblock}{105}(88,15)
    \begin{center}
      \chopinscript{%
        \Huge\noindent\textcolor{shivablue}{The Shiva Shakti Foundation}
      }\\[2ex]
      Main Building\quad
      567\textsuperscript{th} floor\quad
      Room 123\quad
      Bangkok
    \end{center}
  \end{textblock}
  \begin{textblock}{2}(10,13)
    \includegraphics[scale=.3]{shiva_shakti.jpg}
  \end{textblock}
}
\endinput
```

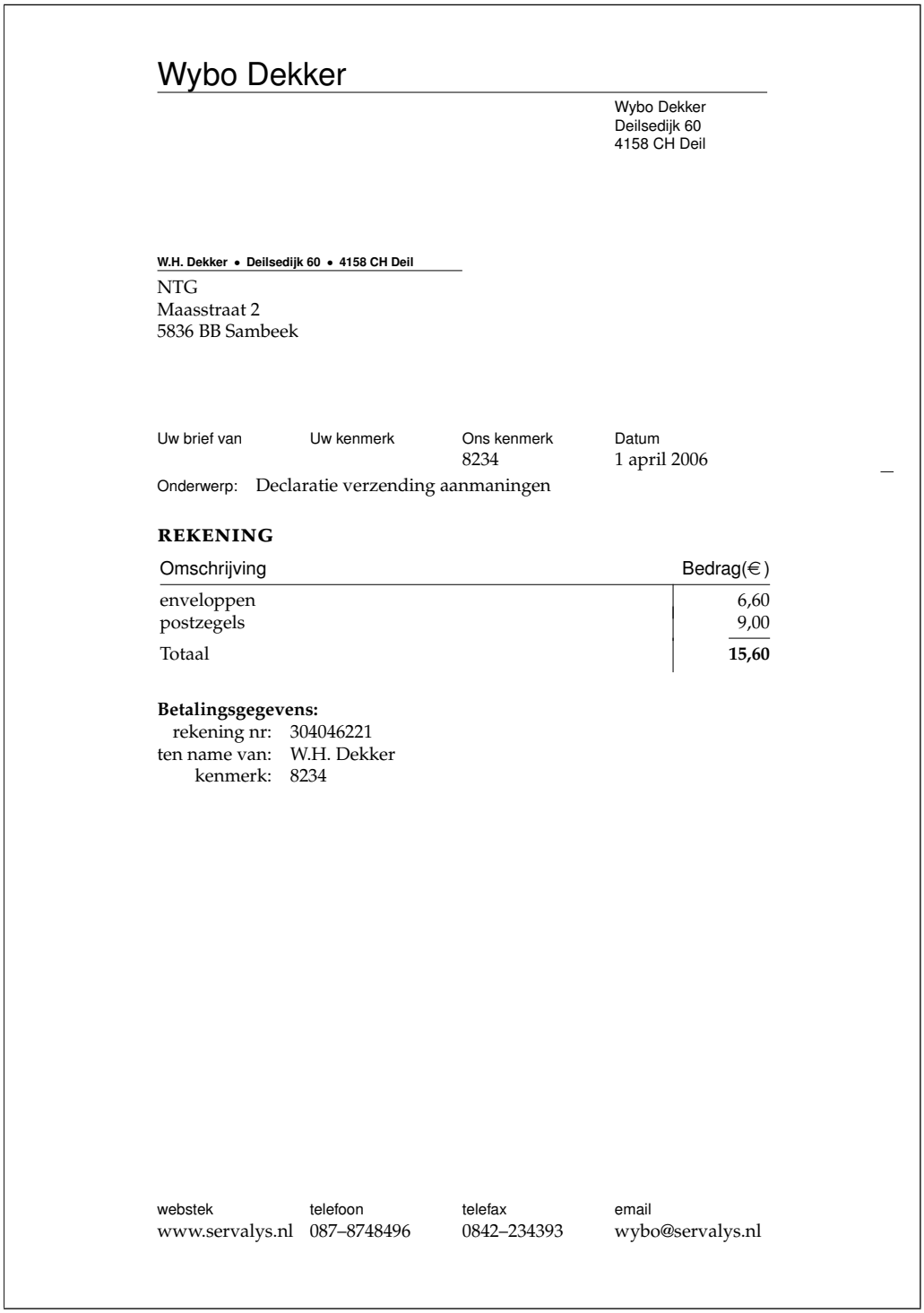
The letter source does not use the `autograph` key, so the default value of `2` is used; we write it in Dutch and use a larger text, just to see what happens if more than one page is generated:

```
\documentclass[11pt,twoside]{isodoc}
\usepackage{logostyle}
\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,
}
\newcommand{\letterbody}{%
  This is an example of a letter made with the isodoc class.
  Note that the date was set to 'today', so the date above the
  letter depends upon the day of compilation.

  The picture in the logo was designed by Pieter Weltevrede.
  The text\footnote{gathered from the \TeX-distribution} has no meaning,
  its only goal is to get a long letter.
  \par\input{typo}
}

\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



Wybo Dekker

Wybo Dekker
Deilsedijk 60
4158 CH Deil

W.H. 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
Totaal	**15,60**

Betalingsgegevens:
rekening nr: 304046221
ten name van: W.H. Dekker
kenmerk: 8234

webstek	telefoon	telefax	email
www.servalys.nl	087–8748496	0842–234393	wybo@servalys.nl

Figure 4: Invoice example

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.

5 Usage: invoices

5.1 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[12pt]{isodoc}
\usepackage{isowybo}
\setupdocument{
  ourref=8234,
  date=20060401,
  subject=Declaratie verzending aanmaningen,
  to=NTG\\Maasstraat 2\\5836 BB Sambeek
}
\begin{document}
\invoice{%
  \itable{
    \iitem{enveloppen}{6,60}
    \iitem{postzegels}{9,00}
    \itotal{15,60}
  }
  \\[3ex]\accountdata
}
\end{document}
```

The result is shown in figure 4.

5.2 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{isontg}
\setupdocument{accept,
  acceptdesc=NTG\\2006,
  acceptdescription=Contributie 2006,
  acceptreference=4000 0000 2006 0308,
  date=20060503,
  subject=Contributie 2006,
  nofooter
}
\begin{document}
\invoice[
  to=W.H. Dekker\\Deilsedijk 60\\4158 CH Deil,
  acceptaccount=304046221,
  accepteuros=40,
  acceptcents=00,
  ourref=308,
]{\itable{\iitem{Contributie NTG voor 2006}{40,00}}\\[3ex]
  \accountdata
  \begin{textblock}{210}(0,199.5)
```

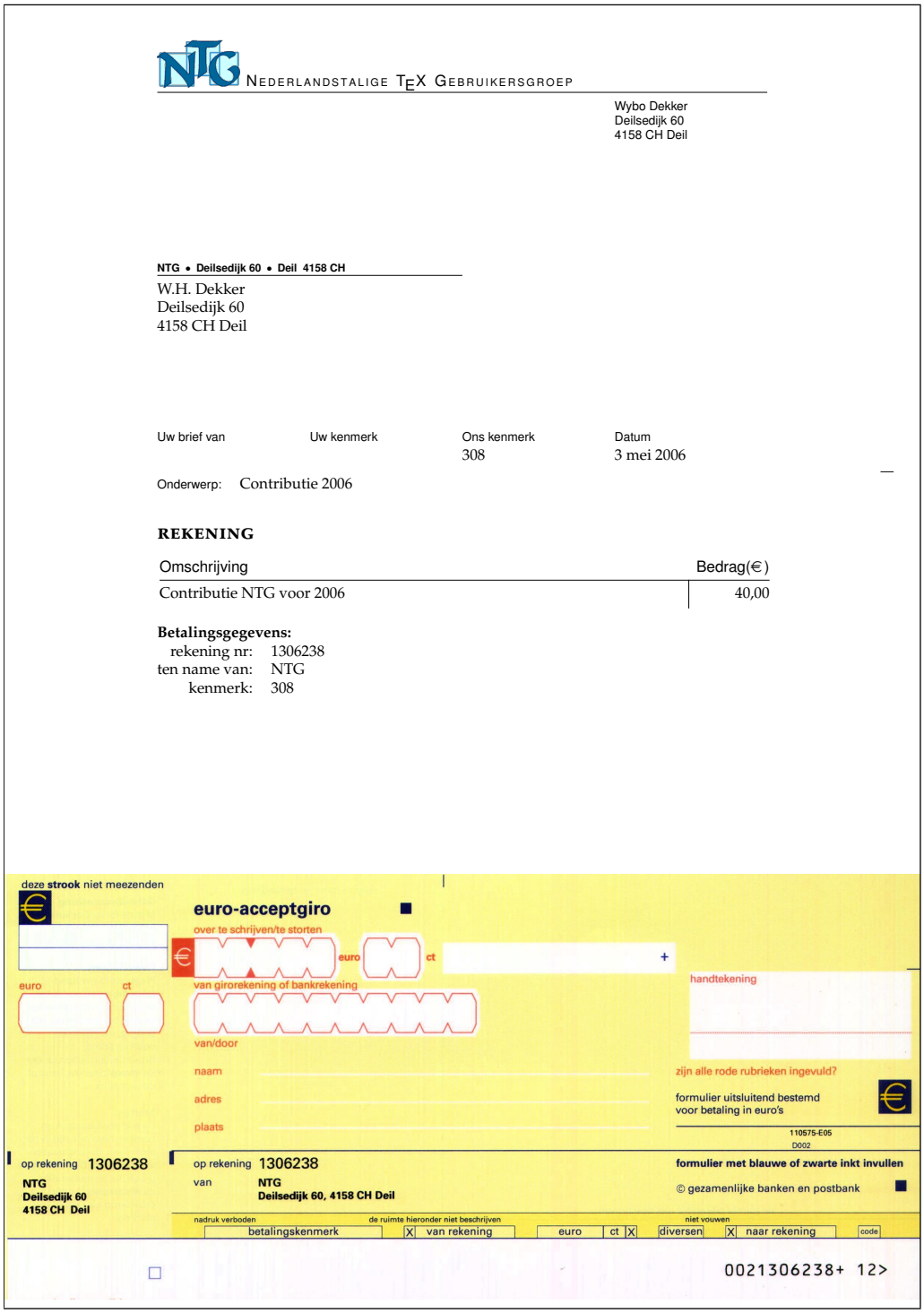


Figure 5: Invoice example with accept form

```
    \noindent\includegraphics[width=210mm]{acceptform.jpg}
  \end{textblock}
}
\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.

6 Implementation

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

```
\DeclareOption*{\PassOptionsToClass{\CurrentOption}{article}}
\ProcessOptions
\LoadClass{article}
```

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

```
\RequirePackage{ctable,eurosym,graphicx,stringstrings}
\RequirePackage[dutch,norsk,german,frenchb,american,english]{babel}
```

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. If the class option `landscape` is used, the paper still stays divided in 1mm x 1mm cells. This may be useful if you use the isodoc class for other purposes.

```
\RequirePackage[a4paper,margin=35mm,nofoot,head=\baselineskip]{geometry}
\RequirePackage[absolute,overlay]{textpos}
\ifdim\paperwidth>\paperheight\TPGrid{297}{210}\else\TPGrid{210}{297}\fi
```

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

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

headingcolor `headingcolor:` color for the fancy headings

markercolor `markercolor:` color for the folding marks

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

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

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

```
\RequirePackage{fancyhdr}
\pagestyle{fancy}
\fancyhf{}
\if@twoside
  \fancyhead[LE,RO]{\color{headingcolor}%
     \pagetext\ \thepage\ \oftext{} \pageref{LastPageOf\thelettercount}}
  \fancyhead[RE,LO]{\color{headingcolor}%
     \totext: \toname\ (\date)}
\else
  \fancyhead[L]{\color{headingcolor}%
     \totext: \toname\ (\date)}
  \fancyhead[R]{\color{headingcolor}%
```

```
      \pagetext\ \thepage\ \oftext{} \pageref{LastPageOf\thelettercount}}
\fi
```

The \xxxdoc commands (like \dutchdoc) set the default language via \AtBeginDocument, but other language changes should be done without that. So we must have a boolean to check if we are in the preamble:

```
\newif\ifpreamble\preambletrue
\AtBeginDocument{\preamblefalse}
```

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

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

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

```
\def\@hft{\footnotesize\sffamily\color{headcolor}}
```

6.1 The options and their defaults

6.1.1 General options

fontpackage

The default font is latin modern (using the lmodern package). The fontpackage option can be used to select another font.

```
\define@key{isodoc}{fontpackage}{\def\fontpackage{#1}}
                                  \def\fontpackage{lmodern}
```

shift

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

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

foreign

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

```
\define@key{isodoc}{cityzip}[\cityziptrue]{\cityziptrue}
                                            \newif\ifcityzip\cityzipfalse
\define@key{isodoc}{foreign}[\foreigntrue]{\foreigntrue}
                                            \newif\ifforeign\foreignfalse
\define@key{isodoc}{localbank}[\localbanktrue]{\localbanktrue}
                                            \newif\iflocalbank\localbankfalse
```

dutch
english
german
american
french
norwegian

The following keys set the language; English, set at the \EndOfClass is the default.

```
\define@key{isodoc}{dutch}   []{\dutchdoc}
\define@key{isodoc}{english} []{\englishdoc}
                                 \AtEndOfClass{\englishdoc}
\define@key{isodoc}{german}  []{\germandoc}
\define@key{isodoc}{american}[]{\americandoc}
\define@key{isodoc}{french}  []{\frenchdoc}
\define@key{isodoc}{norwegian}  []{\norwegiandoc}
```

fill
nofill

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

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

6.1.2 Logo

company
logoaddress
who
street
city
zip
country
countrycode

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

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

6.1.3 Address window

leftaddress
rightaddress
addresscenter
addresswidth

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

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

to

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

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

return
noreturn
returnaddress

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

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

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

6.1.4 Header

header
noheader

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

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

bodyshift

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

```
\define@key{isodoc}{bodyshift} {\advance\headerpos#1\advance\bodyskip#1mm}
                                  \newdimen\bodyskip\bodyskip=0mm
\newcount\headerpos\headerpos=98
```

6.1.5 Footer

footer
nofooter

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

```
\define@key{isodoc}{footer}  []{\footertrue}
                  \newif\iffooter\footerfalse
\define@key{isodoc}{nofooter}[]{\footerfalse}
```

areacode
phone
phoneprefix
cellphone
fax
website
email

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

```
\define@key{isodoc}{areacode}   {\def\areacode{#1}}
                                 \def\areacode{\Undefined{areacode}}
\define@key{isodoc}{phone}      {\def\phone{#1}}
                                 \def\phone{}
\define@key{isodoc}{phoneprefix}{\def\phoneprefix{#1}}
                                 \def\phoneprefix{0}
\define@key{isodoc}{cellphone}  {\def\cellphone{#1}}
                                 \def\cellphone{}
\define@key{isodoc}{fax}        {\def\fax{#1}}
                                 \def\fax{}
\define@key{isodoc}{website}    {\def\website{#1}}
                                 \def\website{}
\define@key{isodoc}{email}      {\def\email{#1}}
                                 \def\email{}
\def\lead{\ifforeign+\areacode-\else\phoneprefix\fi}
```

6.1.6 Folding mark

nofold

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

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

foldleft
foldright

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

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

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

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

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

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

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

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

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

6.1.7 Header fields

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

ourref
yourref
yourletter

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

date The date must be entered in either of three formats: yyyy-mm-dd, yyyymmdd or the string today. Here we check that a correct format is offered and that the values for mm and dd are in the range 1–12 and 1–31 respectively. The string today sets the date to today's date.

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

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

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

subject The subject is empty by default and will be typeset.

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

opening
openingcomma

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

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

6.1.8 Closing, autograph, signature

closing
closingskip

The closing, something like 'Best regards', is set by the closing option; the default is 'Undefined closing'. It will be preceded by a vertical skip, which can be set by the closingskip option, which is 2\baselineskip by default:

```
\define@key{isodoc}{closing}    {\def\closing{#1,}}
                                 \def\closing{\Undefined{closing}} % Best regards,
```

```
\define@key{isodoc}{closingskip}{\closingskip=#1}
            \newdimen\closingskip\closingskip=2\baselineskip
```

autograph

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

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

signature

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

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

enclosures

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

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

6.1.9 Invoice specific data

term
accountno
routingno
accountname
iban
bic
vatno
chamber
currency

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

```
\define@key{isodoc}{term}   [30]{\def\term{#1}}
\define@key{isodoc}{accountno}  {\def\accountno{#1}}
\define@key{isodoc}{routingno}  {\def\routingno{#1}}
\define@key{isodoc}{accountname}{\def\accountname{#1}}
\define@key{isodoc}{iban}       {\def\iban{#1}}
\define@key{isodoc}{bic}        {\def\bic{#1}}
\define@key{isodoc}{vatno}      {\def\vatno{#1}}
\define@key{isodoc}{chamber}    {\def\chamber{#1}}
                                 \def\chamber{Undefined{chamber}}
\define@key{isodoc}{currency}   {\def\currency{#1}}
 \def\currency{\EUR}
```

accept
acceptaccount
acceptaddress
acceptcents
acceptdescription
acceptdesc
accepteuros
acceptreference

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

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

For now, we define field positons 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 tyepset in a Tbox (T) or in a Cbox (C):

```
                                        description       T
ref                                     description       T
ref                euros cents               reference    C

eur ct                 account                           C

desc               address                               T
desc               address
desc               address
```

```
\def\xacceptdescription{105}\def\yacceptdescription{200}\def\wacceptdescription{100} %T
\def\xacceptref{7}          \def\yacceptref{212}        \def\wacceptref{30}          %T
\def\xaccepteuros{60}       \def\yaccepteuros{216}      \def\waccepteuros{32}        %C
\def\xacceptcents{89}       \def\yacceptcents{216}      \def\wacceptcents{13}        %C
\def\xacceptreference{125}  \def\yacceptreference{216}  \def\wacceptreference{55}    %C
\def\xaccepteur{14.4}       \def\yaccepteur{228.5}      \def\waccepteur{21}          %C
\def\xacceptct{32}          \def\yacceptct{228.5}       \def\wacceptct{9}            %C
\def\xacceptaccount{75}     \def\yacceptaccount{228.5}  \def\wacceptaccount{65}      %C
\def\xacceptdesc{7}         \def\yacceptdesc{241}       \def\wacceptdesc{26}         %T
\def\xacceptaddress{58}     \def\yacceptaddress{241}    \def\wacceptaddress{90}      %T
```

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

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

6.2 User Macros

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.[6]
The arguments 3 - 6 can be found by measuring those (with the gimp, for example) in the unscaled (raw) image (which is the last argument).

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

\autograph

```
\newdimen\myoutdent
\newdimen\signskip
\newdimen\mydown
\def\autograph#1#2#3#4#5#6#7{%
  \ifnum #1<2
    \ClassError{isodoc}{autograph #1 cannot be changed (first arg must be 2..9)}{}
  \fi
  \ifnum #1>9
    \ClassError{isodoc}{autograph #1 cannot be changed (first arg must be 2..9)}{}
  \fi
  \bgroup
  \lccode`2=`A \lccode`6=`E
  \lccode`3=`B \lccode`7=`F
  \lccode`4=`C \lccode`8=`G
```

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

```
  \lccode`5=`D \lccode`9=`H
  \lowercase{\def\temp{#1}}%
  \expandafter\egroup\expandafter\def\csname autograph\temp\endcsname{%
    \myoutdent=#3
    \signskip=#5\advance\signskip-#4
    \mydown=#6\advance\mydown-#4
    \par\hspace*{-#2\myoutdent}%
    \raisebox{-#2\mydown}[0bp][0bp]{\includegraphics[scale=#2]{#7}}\\[-\baselineskip]
    \closing\\[-2\baselineskip]\\[#2\signskip]\signature%
  }
}
```

6.2.1 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. If the osf-txfonts package is used, oldstyle figures are disabled here.

\logo

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

\returnaddress

```
\def\returnaddress{%
  \ifx\undefined\tbfigures\else\tbfigures\fi % when using osf-txfonts... just for me
  \company\\
  \street\\
  \zippedcity
  \ifforeign\\\country\fi
}
```

\setupdocument

```
\newcommand{\setupdocument}[1]{
  \setkeys{isodoc}{#1}
  \iffooter\else\geometry{bottom=25mm}\fi
  \RequirePackage[T1]{fontenc}
  \RequirePackage{\fontpackage}\pdfprotrudechars=1
}
```

\@isomakedate

```
\newcount\@isoyear   \@isoyear=\year  \year=0
\newcount\@isomonth \@isomonth=\month
\newcount\@isoday     \@isoday=\day
\def\@isomakedate#1{%
  \def\@isoarg{#1}\def\@isotoday{today}
  \ifx\@isoarg\@isotoday
```

```
    \year=\@isoyear
   \month=\@isomonth
     \day=\@isoday
 \else
   \stringlength[q]{\@isoarg}
   \ifnum\theresult=10
     \substring[q]{\@isoarg}{5}{5}
     \if\thestring-\else\ClassError{isodoc}{
       Illegal date separator: \thestring (must be -)}{}\fi
     \substring[q]{\@isoarg}{8}{8}
     \if\thestring-\else\ClassError{isodoc}{
       Illegal date separator: \thestring (must be -)}{}\fi
   \else
     \ifnum\theresult=8\else\ClassError{isodoc}{
       Illegal date: not yyyymmdd | yyyy-mm-dd | today}{}\fi
   \fi
   \Treatments{0}{0}{0}{1}{0}{0}
   \substring[q]{\@isoarg}{1}{$} \let\@isodigits=\thestring \def\@isoarg{\thestring}
   \stringlength[q]{\@isodigits}
   \ifnum\theresult=8\else\ClassError{isodoc}{Illegal date: must have 8 digits}{}\fi
   \substring[q]{\@isoarg}{1}{4}  \year=\thestring \def\@isoarg{\@isodigits}
   \substring[q]{\@isoarg}{5}{6} \month=\thestring \def\@isoarg{\@isodigits}
   \substring[q]{\@isoarg}{7}{8}   \day=\thestring \def\@isoarg{\@isodigits}
   \ifnum \month > 12 \ClassError{isodoc}{Illegal date: month>12}{}\fi
   \ifnum \day   > 31 \ClassError{isodoc}{Illegal date: day>31}{}\fi
 \fi
}
```

`\footfield` Create any non-empty footfields, starting at left arguments:

1. fieldlabel
2. a prefix for the content (for phone numbers)
3. the content

```
\def\footfield#1#2#3{%
  \ifx#3\empty\else
    \Tbox{\footcount}{275}{35}{\noindent
      {\@hft#1}\\
        #2#3
    }
    \advance\footcount35
  \fi
}
```

`\accountdata` Print a table with banking information. Show account number, account name + city, and a reference. If the `foreign` key was used, IBAN and BIC codes are also reported.

```
\def\accountdata{
  \textbf{\accountdatatext:}\\
  \begin{tabular}{@{}rl@{}}
    \ifx\term\undefined\else
            \termtext: & \term\ \daystext\\
    \fi
        \accountnotext: & \accountno\\
    \ifx\accountname\undefined\else
       \accountnametext: & \accountname{}\\
    \fi
    \ifx\routingno\undefined\else
       \routingnotext: & \routingno{}\\
    \fi
        \referencetext: & \ourref\\
    \ifforeign
      \iflocalbank\else
                  iban: & \scshape \iban\\
                   bic: & \scshape \bic\\
```

```
      \fi
    \fi
    \ifx\vatno\undefined\else
      \vatnotext: & \vatno\\
    \fi
  \end{tabular}
}
```

The \showkeys command is useful for debugging. It prints a table showing the values of most keys.[7]

\showkeys

```
\def\showkeys{%
  \begin{tabular}{ll}
              accept & \accept\NN
       acceptaccount & \acceptaccount\NN
       acceptaddress & \acceptaddress\NN
         acceptcents & \acceptcents\NN
          acceptdesc & \acceptdesc\NN
   acceptdescription & \acceptdescription\NN
        accepteuros & \accepteuros\NN
     acceptreference & \acceptreference\NN
        accountname & \accountname\NN
          accountno & \accountno\NN
      addresscenter & \addresscenter\NN
       addresswidth & \addresswidth\NN
           areacode & \areacode\NN
          autograph & \autograph\NN
                bic & \bic\NN
          cellphone & \cellphone\NN
            chamber & \chamber\NN
               city & \city\NN
            closing & \closing\NN
            company & \company\NN
            country & \country\NN
        countrycode & \countrycode\NN
           currency & \currency\NN
              email & \email\NN
         enclosures & \enclosures\NN
                fax & \fax\NN
        fontpackage & \fontpackage\NN
          forcedate & \forcedate\NN
               iban & \iban\NN
        leftaddress & \leftaddress\NN
        logoaddress & \logoaddress\NN
            opening & \opening\NN
       openingcomma & \openingcomma\NN
             ourref & \ourref\NN
              phone & \phone\NN
       phoneprefix & \phoneprefix\NN
      returnaddress & \returnaddress\NN
       rightaddress & \rightaddress\NN
          routingno & \routingno\NN
          signature & \signature\NN
             street & \street\NN
            subject & \subject\NN
               term & \term\NN
              vatno & \vatno\NN
            website & \website\NN
                who & \who\NN
         yourletter & \yourletter\NN
            yourref & \yourref\NN
                zip & \zip\NN
```

[7] Note for developers: the table lines below can be generated with a ruby script listkeys (included in the distribution): `listkeys defs`

```
  \end{tabular}
}
\AtEndOfClass{%
  \usepackage{hyperref}
   \year=0
}
\AtEndDocument{%
  \hypersetup{pdfauthor={\who},
              pdfproducer={isodoc v\fileversion},
  }
}
% \DescribeMacro{\itable}
% |\itable| inserts an invoice table; arg1 should be the rows of the table.
%    \begin{macrocode}
\def\itable#1{
  \begin{tabularx}{\hsize}{@{}X@{\barsep\quad\qquad}r@{}}
    \multicolumn{2}{@{}c@{}}{\sffamily\descriptiontext\hfill
    \amounttext (\currency)}\ML
    #1
  \end{tabularx}
}
% \DescribeMacro{\iitem}
% |\iitem| inserts an invoice item in the |\itable|.
% It inserts |arg1 & % arg2\NN|:
%    \begin{macrocode}
\def\iitem#1#2{#1&#2\NN}
% \DescribeMacro{\itotal}
```

`\itotal` inserts an invoice total in the `\itable`.
It inserts `\cmidrule[.05em]{2-2}Total & arg1\NN`:

```
\def\itotal#1{\cmidrule[.05em]{2-2}\Totaltext&\textbf{#1}\NN}
```

The counter `\lettercount` is used to construct a label on the last page of each letter/invoice of this document; it wil be set to `LastPageOfn`, where *n* is the letter number: 1, 2, 3, ... This allows for page headings saying "Page n of m." Whether we are on the last page of a letter is only known either at `\end{document}` or when a new letter is started. This is why a label is set at the start of a `\letter` call, thus labeling the last page of the previous letter and using `\AtEndDocument` for the last letter, which would otherwise stay unlabeled.

```
\newcounter{lettercount}\setcounter{lettercount}{0}
\AtEndDocument{\label{LastPageOf\thelettercount}}
```

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

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

```
\newif\ifclosing\closingtrue
\newcount\footcount
\newcommand{\invoice}[2][]{%
  \closingfalse
  \def\barsep{\raisebox{-1.5ex}[0pt][0pt]{\rule{.05em}{4ex}}}%
  \letter[#1,opening=\invoicetext,openingcomma={},closing={},signature={}]{%
    \Tbox{35}{127}{140}{#2}
  }
}
```

`\letter` `\letter` prints a letter...

```
\newcommand{\letter}[2][]{{ % extra brace keeps option changes local
  \setkeys{isodoc}{#1}
```

```
\hypersetup{pdftitle={letter to \toname\ dated \today},
            pdfsubject={\subject}}
\label{LastPageOf\thelettercount}
\newpage
\addtocounter{lettercount}{1}
\setcounter{page}{1}
\setcounter{footnote}{0}
\logo
```

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

```
{ \parskip=0pt\parindent=0pt
  \begin{textblock}{\addresswidth}[0,.5](\xaddress,\addresscenter)%
      \ifreturn
        {\def\\{\unskip\enspace\textbullet\enspace\ignorespaces}%
          \sffamily\bfseries\scriptsize\returnaddress
        }\\[-.8\baselineskip]
        \rule{\hsize}{.2pt}\\
      \fi
      \toname\\\toaddress
  \end{textblock}
}
\openingpos=\headerpos
\ifheader
  \advance\openingpos12
  \advance\bodyskip12mm
  \Tbox{35}{\headerpos}{35}{\noindent
    {\@hft\yourlettertext}\\
    \yourletter
  }
  \Tbox{70}{\headerpos}{35}{\noindent
    {\@hft\yourreftext}\\
    \raggedright\yourref
  }
  \Tbox{105}{\headerpos}{35}{\noindent
    {\@hft\ourreftext}\\
    \raggedright\ourref
  }
  \Tbox{140}{\headerpos}{35}{\noindent
    {\@hft\datetext}\\
    \ifx\forcedate\empty%
      \ifnum\year=0\Undefined{date}\else\date\fi
    \else\forcedate\fi
  }
  \ifx\subject\empty\else%
   \advance\openingpos10
    \advance\bodyskip10mm
    \Tbox{35}{108}{105}{\noindent
      \begin{tabularx}{\hsize}{@{}l>{\raggedright}X@{}}
        @hft\subjecttext&\subject
      \end{tabularx}
    }
  \fi
\fi
\footcount=35
\iffooter
  \footfield{\websitetext}{}{\website}
  \footfield{\phonetext}{\lead}{\phone}
  \footfield{\cellphonetext}{\lead}{\cellphone}
  \footfield{\faxtext}{\lead}{\fax}
  \footfield{\emailtext}{}{\email}
\fi
{ \parskip=0pt\parindent=0pt
```

```
    \begin{textblock*}{3mm}(\xfold,\yfold)%
       {\color{markercolor}\rule{\hsize}{.2pt}}
    \end{textblock*}
  }
  \ifx\undefined\accepttype\else\accept\fi
  \ifx\subject\empty\vspace*{80mm}\else\vspace*{90mm}\fi
  \noindent\Tbox{35}{\ifx\subject\empty110\else120\fi}{140}{\opening\openingcomma}
  \thispagestyle{empty}

  \thispagestyle{empty}
  \noindent
  #2
  {\parindent=0pt\parskip=\baselineskip
    \ifclosing
      \ifcase\autographversion
        \par\closing\\\signature                % 0: closing on the next line
      \or\par\closing\\[\closingskip]\signature % 1: whiteskip
      \or\autographA
      \or\autographB
      \or\autographC
      \or\autographD
      \or\autographE
      \or\autographF
      \or\autographG
      \or\autographH
      \else
        \par\Undefined{autograph: \autographversion}\\
      \fi
    \fi
    \ifx\enclosures\empty\else
      \vfill
      \setbox1=\vbox{\enclosures}%
      \textbf{\ifdim\ht1>\baselineskip\enclosurestext\else\enclosuretext\fi}%
      \\\enclosures
    \fi
  }
}}
```

6.3 Internal Macros

The accept is produced from \Tbox and \Cbox commands only, using the textpos package:

\Cbox `\Cbox{x}{y}{width}{text}` places `text` in a box of `\testsl{width}` mm, centered around (x,y) in mm:

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

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

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

```
    \end{textblock}
  }
}
```

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

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

\dutchdoc Definitions of field names in various languages; corrections and suggestions are very welcome:

```
\def\set@lang#1{%
  \ifpreamble\AtBeginDocument{\selectlanguage{#1}}%
  \else\selectlanguage{#1}\fi}
\def\dutchdoc{%
  \set@lang{dutch}
  \def\yourlettertext{Uw brief van}
  \def\yourreftext{Uw kenmerk}
  \def\ourreftext{Ons kenmerk}
  \def\datetext{Datum}
  \def\totext{Aan}
  \def\pagetext{Bladnummer}
  \def\oftext{van}
  \def\date{\number\day~\ifcase\month\or
    januari\or februari\or maart\or april\or mei\or juni\or juli\or
```

```
    augustus\or september\or oktober\or november\or december\fi
    \space \number\year}
  \def\subjecttext{Onderwerp:}
  \def\ccname{Cc:}
  \def\enclosuretext{Bijlage:}
  \def\enclosurestext{Bijlagen:}
  \def\faxtext{telefax}
  \def\websitetext{webstek}
  \def\emailtext{email}
  \def\phonetext{telefoon}
  \def\cellphonetext{mobiel}
  \def\chambertext{kvk}
  \def\invoicetext{{\bfseries\Large\scshape rekening}}
  \def\descriptiontext{Omschrijving}
  \def\amounttext{Bedrag}
  \def\accountdatatext{Betalingsgegevens}
  \def\termtext{betalingstermijn}
  \def\daystext{dagen}
  \def\accountnotext{rekening nr}
  \def\accountnametext{ten name van}
  \def\referencetext{kenmerk}
  \def\chambertext{kvk}
  \def\vatnotext{btw nr}
  \def\Vattext{Btw}
  \def\Totaltext{Totaal}
}
```

\englishdoc

```
\def\englishdoc{%
  \set@lang{english}
  \def\yourlettertext{Your letter of}
  \def\yourreftext{Your reference}
  \def\ourreftext{Our reference}
  \def\datetext{Date}
  \def\totext{To}
  \def\pagetext{Page}
  \def\oftext{of}
  \def\date{\ifcase\day\or
    1st\or 2nd\or 3rd\or 4th\or 5th\or
    6th\or 7th\or 8th\or 9th\or 10th\or
    11th\or 12th\or 13th\or 14th\or 15th\or
    16th\or 17th\or 18th\or 19th\or 20th\or
    21st\or 22nd\or 23rd\or 24th\or 25th\or
    26th\or 27th\or 28th\or 29th\or 30th\or
    31st\fi~\ifcase\month\or
    January\or February\or March\or April\or May\or June\or
    July\or August\or September\or October\or November\or December\fi
    \space \number\year}
  \def\subjecttext{Subject:}
  \def\ccname{cc}
  \def\enclosuretext{Enclosure:}
  \def\enclosurestext{Enclosures:}
  \def\faxtext{telefax}
  \def\websitetext{website}
  \def\emailtext{email}
  \def\phonetext{telephone}
  \def\cellphonetext{cellphone}
  \def\invoicetext{{\bfseries\Large\scshape invoice}}
  \def\descriptiontext{Description}
  \def\amounttext{Amount}
  \def\accountdatatext{Banking data}
  \def\termtext{term of payment}
  \def\daystext{days}
```

```
  \def\accountnotext{Account no.}
  \def\accountnametext{to the name of}
  \def\referencetext{Reference}
  \def\chambertext{ch.comm.}
  \def\vatnotext{vat no.}
  \def\Vattext{Vat}
  \def\Totaltext{Total}
}
```

\americandoc

```
\def\americandoc{%
  \set@lang{american}
  \def\yourlettertext{Your letter of}
  \def\yourreftext{Your reference}
  \def\ourreftext{Our reference}
  \def\datetext{Date}
  \def\totext{To}
  \def\pagetext{Page}
  \def\oftext{of}
  \def\date{\ifcase\month\or
    January\or February\or March\or April\or May\or June\or
    July\or August\or September\or October\or November\or December\fi
    \space\number\day, \number\year}
  \def\subjecttext{Subject:}
  \def\ccname{cc}
  \def\enclosuretext{Enclosure:}
  \def\enclosurestext{Enclosures:}
  \def\faxtext{telefax}
  \def\websitetext{website}
  \def\emailtext{email}
  \def\phonetext{telephone}
  \def\cellphonetext{cellphone}
  \def\invoicetext{{\bfseries\Large\scshape invoice}}
  \def\descriptiontext{Description}
  \def\amounttext{Amount}
  \def\accountdatatext{Bank details}
  \def\termtext{term of payment}
  \def\daystext{days}
  \def\accountnotext{Account no.}
  \def\accountnametext{to the name of}
  \def\referencetext{Reference}
  \def\chambertext{ch.comm.}
  \def\vatnotext{vat no.}
  \def\Vattext{Vat}
  \def\Totaltext{Total}
}
```

\germandoc

```
\def\germandoc{%
  \set@lang{german}
  \def\yourlettertext{Ihr Brief vom}
  \def\yourreftext{Ihr Zeichen}
  \def\ourreftext{Unser Zeichen}
  \def\datetext{Datum}
  \def\totext{An}
  \def\pagetext{Seite}
  \def\oftext{aus}
  \def\date{\number\day.~\ifcase\month\or
    Januar\or Februar\or M\"arz\or April\or Mai\or Juni\or
    Juli\or August\or September\or Oktober\or November\or Dezember\fi
    \space\number\year}
  \def\subjecttext{Betrifft:}
  \def\ccname{Kopien an}
```

```
  \def\enclosuretext{Anlage:}
  \def\enclosurestext{Anlagen:}
  \def\faxtext{Telefax}
  \def\websitetext{Webseite}
  \def\emailtext{Email}
  \def\phonetext{Telefon}
  \def\cellphonetext{Handy}
  \def\invoicetext{{\bfseries\Large\scshape rechnung}}
  \def\descriptiontext{Umschreibung}
  \def\amounttext{Betrag}
  \def\accountdatatext{Bezahlungsdaten}
  \def\termtext{Zahlungstermin}
  \def\daystext{Tage}
  \def\accountnotext{Konto Nr}
  \def\routingnotext{BLZ}
  \def\accountnametext{Name}
  \def\referencetext{Beleg Nr}
  \def\chambertext{Register Nr}
  \def\vatnotext{Ustid Nr}
  \def\Vattext{MwSt}
  \def\Totaltext{Insgesamt}
}
```

\frenchdoc

```
\def\frenchdoc{%
  \set@lang{french}
  \def\yourlettertext{Votre lettre du}
  \def\yourreftext{Vos r\'ef\'erences:}
  \def\ourreftext{Nos r\'ef\'erences:}
  \def\datetext{Date:}
  \def\totext{\`A l'attention de}
  \def\pagetext{Page}
  \def\oftext{de}
  \def\date{\number\day\ifnum\day=1$^{er}$\fi
    ~\ifcase\month\or janvier\or
    f\'evrier\or mars\or avril\or mai\or juin\or
    juillet\or ao\^ut\or septembre\or octobre\or
    novembre\or d\'ecembre\fi \space \number\year}
  \def\subjecttext{Objet:}
  \def\ccname{Copie \`a}
  \def\enclosuretext{Pi\`ece jointe:}
  \def\enclosurestext{Pi\`eces jointes:}
  \def\faxtext{t\'el\'efax}
  \def\websitetext{site Web}
  \def\emailtext{email}
  \def\phonetext{t\'el\'ephone}
  \def\cellphonetext{portable}
  \def\invoicetext{{\bfseries\Large\scshape facture}}
  \def\descriptiontext{Description}
  \def\amounttext{Montant}
  \def\accountdatatext{Donn\'ees banquaires}
  \def\termtext{terme}
  \def\daystext{jours}
  \def\accountnotext{no. compte}
  \def\accountnametext{au nom de}
  \def\referencetext{r\'ef\'erence}
  \def\chambertext{c.c.i.}
  \def\vatnotext{no. T.V.A.}
  \def\Vattext{T.V.A.}
  \def\Totaltext{Total}
}
```

\norwegiandoc

```
\def\norwegiandoc{%
  \set@lang{norsk}
  \def\yourlettertext{Deres brev av}
  \def\yourreftext{Deres ref:}
  \def\ourreftext{V\aa{}r ref:}
  \def\datetext{Dato}
  \def\totext{Til}
  \def\pagetext{Side}
  \def\oftext{av}
  \def\date{\number\day.~\ifcase\month\or
   januar\or februar\or mars\or april\or mai\or juni\or
   juli\or august\or september\or oktober\or november\or desember\fi
   \space \number\year}
  \def\subjecttext{Vedr:}
  \def\ccname{kopi til:}
  \def\enclosuretext{Vedlegg:}
  \def\enclosurestext{Vedlegg:}
  \def\faxtext{telefaks}
  \def\websitetext{hjemmeside}
  \def\emailtext{e-post}
  \def\phonetext{telefon}
  \def\cellphonetext{mobil}
  \def\invoicetext{{\bfseries\Large\scshape faktura}}
  \def\descriptiontext{Beskrivelse}
  \def\amounttext{Bel\o{}p}
  \def\accountdatatext{betales til}
  \def\termtext{betalingsfrist}
  \def\daystext{dager}
  \def\accountnotext{faktura nr}
  \def\accountnametext{til}
  \def\referencetext{referanse}
  \def\chambertext{}
  \def\vatnotext{Org. nr.}
  \def\Vattext{Mva}
  \def\Totaltext{Total}
}
```

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