

# iPost PDF

**Design Instructions**

**Version 8.2**

**2010**

(colour instruction added)

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## 1 INTRODUCTION

Produced by Itella Information Oy, iPost is a comprehensive service for corporate customer letter sending. The service is suitable for the needs of different sized companies irrespective of the volume of sent letters – whether single or in tens of thousands. For instance, the letters can be invoices, bank statements, payslips, bulletins and loyal customer letters, produced in accordance with the customer's selection in black and white or colour.

These design instructions apply to data to be submitted in iPost PDF format. In addition, there are design instructions for iPost EPL format.

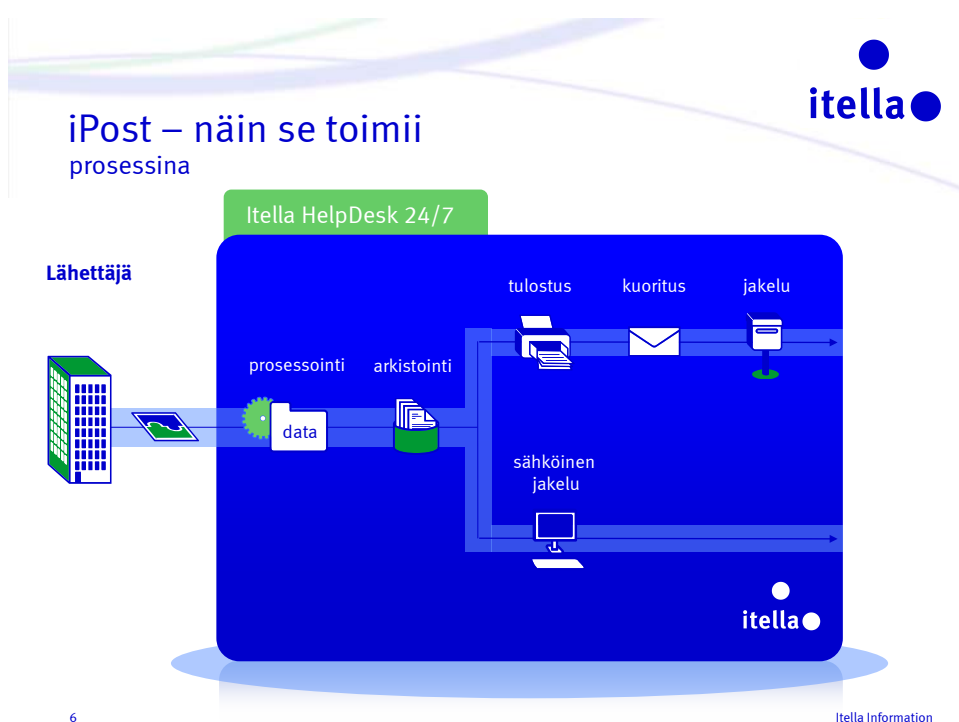


Figure 1 iPost – on paper or electronically.

### 1.1 iPost PDF Service Description

In the iPost PDF service, the customer submits files in PDF and XML format to an agreed FTP directory using either the FTP or SFTP transfer protocol. The PDF file can include letters from several recipients. The accompanying XML file includes data on service operations and the addressees of the letters in the PDF file. The supplier produces the optical enveloping stamps for the material.

The PDF and XML files must always be zipped in the same zip file before sending. Use a program supporting the zip algorithm, e.g. WinZip. If necessary, the zip file can be protected with a password (agreed separately with iPost design).

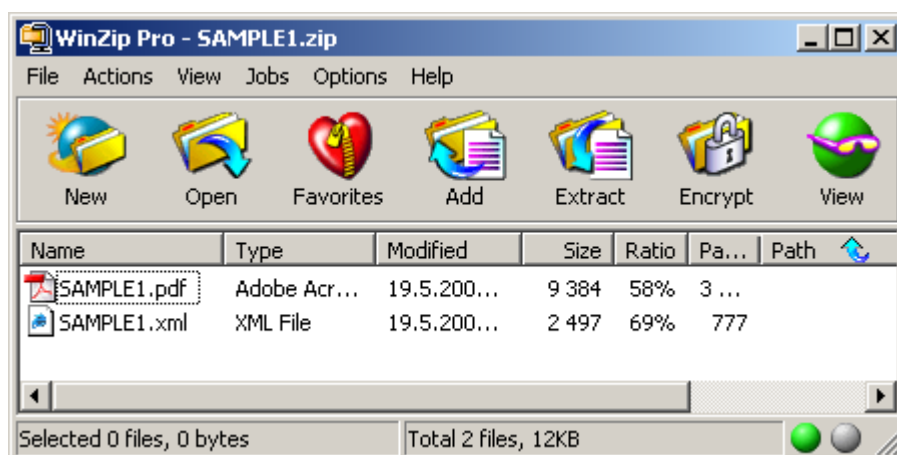


Figure 1 Sample1.zip → Sample1.pdf and Sample2.xml. One zip file may only include one letter batch and two files, one XML and one PDF file.

The service assembles iPost files sent by customers into large output batches, based on which letters are sorted for output by order of the recipients' postal codes. **A sent file cannot be cancelled.**

## 2 XML FILE FORMAT

These design instructions are accompanied by the file **Itella\_LetterBundleV0x4\_200711** which includes version 0.4 of Itella Information Oy's XML model (schema) for sending iPost PDF letters.

### THE FILE INCLUDES

- **LetterBundle\_V0x4.xsd** = LetterBundle XML schema
- **LetterBundle\_V0x4.png** = Diagram with the schema's elements and structure
- **LetterBundle\_V0x4\_SchemaDoc\LetterBundleV0x4.html** = Schema documentation
- **Sample\_PDF\LetterBundle\_V0x4\_SAMPLE1.pdf** = An example of a printed PDF file
- **Sample\_PDF\LetterBundle\_V0x4\_SAMPLE1.xml** = LetterBundle description of the example file, including information on what letters the PDF file includes and the service descriptions.

The control data in the XML file must be in the same order as the letters in the PDF file.

The XML file includes sender-, batch- and letter-specific data. For each recipient, an iPost letter can include one or more pages.

You can find the structure and description of the XML file in the separate instructions named iPost\_SCHEMA\_Design\_Instructions\_v8x2.pdf.

## 3 PDF FILE FORMAT

PDF = Portable Document Format is a file format created by Adobe Systems for representing documents independent of the original application, operating system and hardware used for creating them. As an open standard, the PDF format is publicly available. For creating and reading files, non-Adobe software is also available.

Since PDF files can be created in many ways and with many types of software, even without Adobe Acrobat, a key PDF setting is the file version. We recommend using PDF version 1.2 (Acrobat 3.x). However, the final compatibility of PDF materials with the service can only be established through testing.

PDF files can also be created for various purposes (Internet files, for printing, or for publishing by a printing house). Because their requirements for the file are different, there are different settings for each purpose. Particularly when attaching images (e.g. signatures) to the file, a resolution high enough to enable printing must be ensured. For instance, the resolution of images taken from the Internet is too low for use in printable material. It is recommended to use 300dpi resolution to get good quality printed images. Higher resolution images do not provide better printing quality but they are slower to print due to larger file size.

### 3.1 Other Specifications

Itella printers use a 0 mm margin. For instance, Acrobat software normally uses a scaling option to scale the printout into a size "acceptable" for the printer used in each case. This setting must be off if you wish to view the layout of printouts printed with your printer in identical form to those printed by Itella. We recommend viewing PDF files on screen in addition to printing.

- The size of one page should not exceed 100 kB.
- Itella printers use borderless printing (zero margins)
- The printing resolution for iPost PDF is 600 dpi. Itella interpolates customer's 300 dpi material to 600 dpi in printing phase.
- PDF materials are produced in vertical A4 size (not Letter or A3). Itella will attempt to scale materials produced in other sizes to size A4. However, as a result of the scaling the printed layout may differ from the original.
- Image compression should be avoided or used with high quality setting (e.g. JPEG 90%)
- 
- Images should be black and white in black and white printing. Grey scale images may not appear in black and white printing.
- In the case of colour PDF, the ICC profile for RGB images is sRGB and for CMYK images Euroscale Coated (<http://fi.wikipedia.org/wiki/ICC-profiili> or [http://en.wikipedia.org/wiki/ICC\\_profile](http://en.wikipedia.org/wiki/ICC_profile))
- In the case of a gray scale image, SRGB or CMYK Euroscale Coated colour settings should be used.
- A total colour overlay of 20 per cent is available for colour. Total colour overlay refers to the amount of colour constituents output on the printable surface and expressed as a percentage. The best result is obtained through the modest and well-considered use of colours in forms and images. Use of colours on a page should be as balanced as possible. Dark horizontal colour surfaces should be avoided.
- Creating PDF files requires the acquisition of Adobe Acrobat software. The creation of a PDF file involves two phases: the work is printed from the software to a file, after which it is transformed into PDF format using Distiller software.
- PDF file should not be created using the export function.
- It is not recommended to use other than Adobe's software for making a PDF file.
- PDF files delivered to Itella shall not be protected on any level. For instance, protection by Acrobat Distiller can be removed using Adobe PDF – printer features / Adobe PDF Security.
- PDF files delivered to Itella may not include any opacity effects. The background of company logos should be white.
- Transparency effects may not be used.

- If the letter is 2-sided and the number of pages odd, Itella will add a blank page to serve as the last page. This added page will be invoiced as one additional page.
- If the letter is specified as 2-sided, this will apply to the entire letter. If you wish to have the first page as 1-sided, this must be arranged separately by specifying a blank page on the reverse of the first page.
- Envelopes are specified automatically on the basis of the number of sheets:
  - C5 envelope with large window panel, 1-9 sheets
  - C4 envelope with large window panel, 10–40 sheets
  - Letters including over 40 sheets are manually enveloped in a bag envelope or packaged in a box. In such cases, the delivery time is one day longer than for the normal service.
- Colour letter limited to 40 sheets. Black and white letters may be over 40 sheets.
- Standard materials are used
- No inserts
- eArchive service is subject to special agreement
- Sent material cannot be cancelled
- Different scanning environments produce PDF files in different ways. You should always test whether the PDF file opens with Acrobat software. Final compatibility is verified in connection with testing.

### 3.2 Fonts

All fonts must **always** be delivered embedded in the PDF file.

- For example: with Acrobat Distiller, *Embed all fonts*, one font increases the size of a PDF file by 35–50 KB.

If the font is not embedded with the file, it will be printed using a default font which may distort the layout or prevent printing completely. Remember to ensure at all times that you are licensed to use the font for the required purpose.

- Do not use so-called system fonts, because they are slightly different in different OS versions and may result in incorrect hyphenation of the text or character conversions, even in PDF files.
- Do not change the font to italics, bold, underlined or shaded by using the shortcut keys, since the result can be different for different printers and print resolutions.

## 4 AGREEMENTS

Joining the iPost service presupposes an agreement, covering the iPost service, with Itella. For further information, visit Itella's website at <http://www.itella.fi/ipost/> or send an e-mail to [myynti@itella.com](mailto:myynti@itella.com).

After concluding an agreement, the customer receives a customer code and password for iPost PDF, for the use of which he or she will be responsible. Invoicing is performed monthly, post facto. A department-specific itemisation for the invoice is possible using the department code in the file. Neither subscription nor mailing-specific fees are charged for the service. Unit prices are defined by the total letter amounts of all iPost services illustrated in the letter grade.

### 4.1 Service Promise

Files can be delivered to Itella on a 24/7 basis. The customer is responsible for file transfer, the content of the FTP directory, and costs incurred from data transmission.

- Two (2) days delivery:  
PDF files delivered to the iPost service on working days (Mon-Fri) by 24 p.m. are printed and enveloped on the following workday as well as forwarded to delivery operator. Distribution to the receivers at the latest during the second working day which follows the delivery to the distribution operator. Thus the overall delivery time, from the point material has been left to supplier's server by 24.00 p.m. on workdays (Mon-Fri) until the recipient receives the letter, is 2-3 workdays.
- Four (4) days delivery:  
PDF files delivered to the iPost service on working days (Mon-Fri) by 24 p.m are printed and enveloped on the following workday as well as forwarded to delivery operator. Distribution to the receivers at the latest during the fourth working day which follows the delivery to the distribution operator. Thus the overall delivery time, from the point material has been left to supplier's server by 24.00 p.m. on workdays (Mon-Fri) until the recipient receives the letter, is 5-6 workdays.
- Electronic documents are delivered to NetPosti with the same or faster schedule.

If the material is produced contrary to instructions and/or is unsuitable for the PDF printing process, Itella will inform the sender immediately upon detection of the error. In such cases, Itella is not bound by the abovementioned service commitment.

#### 4.1.1 Automatic E-mail Acknowledgement

For this service, the supplier informs the customer of the time of receipt of the file and its size. We will send an acknowledgement to a maximum of three e-mail addresses. **The customer can order the service from [info@itella.com](mailto:info@itella.com).** Use of the service is free of charge, setup charges are invoiced as per the price list.



## **5 IMPLEMENTATION PROCESS**

### **5.1 General Description**

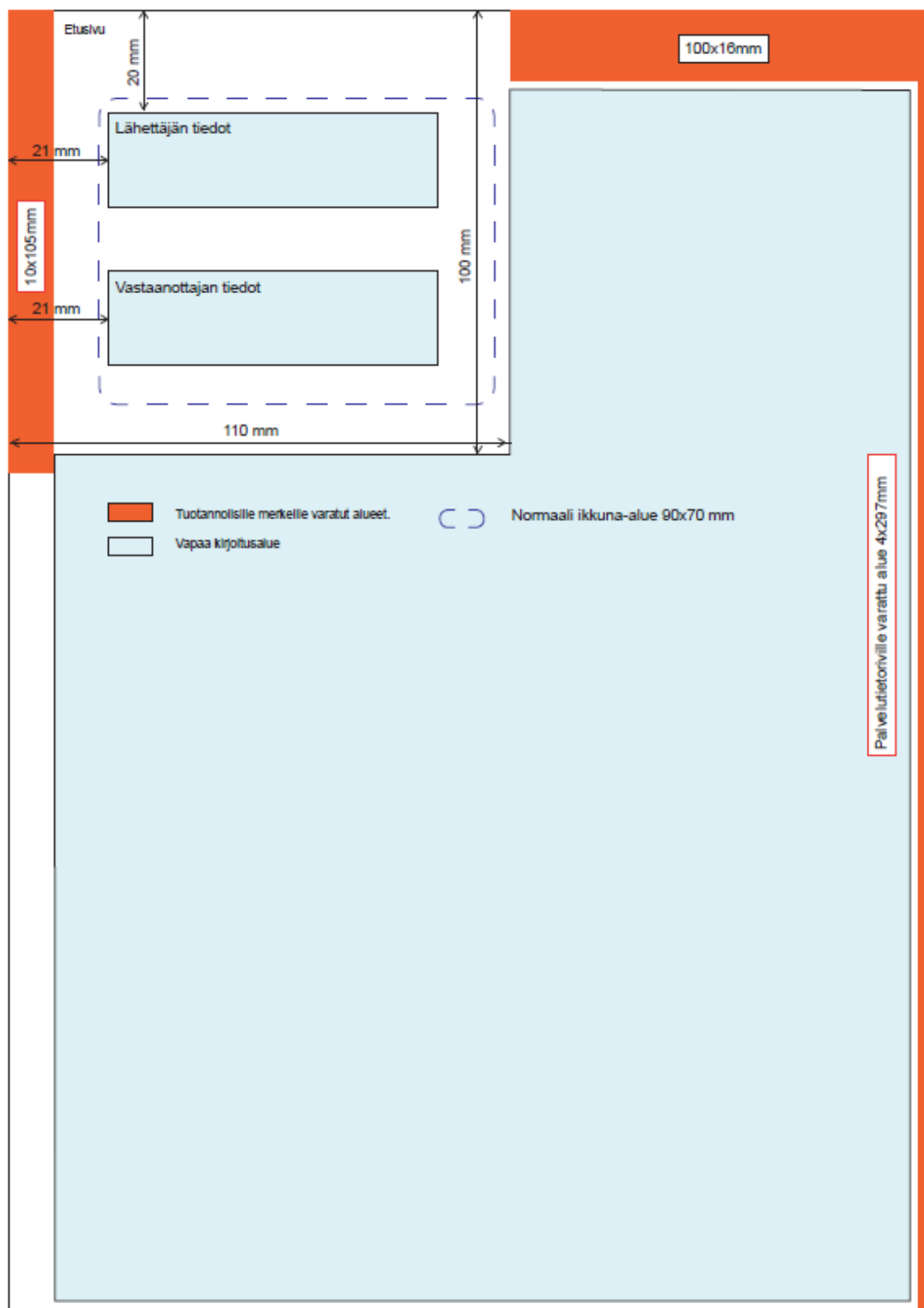
After the agreement has been signed, the unique iPost PDF customer code reserved for the customer will be activated. The customer code and password will be sent to the contact person specified by the customer. The customer will produce PDF and XML format files for testing.

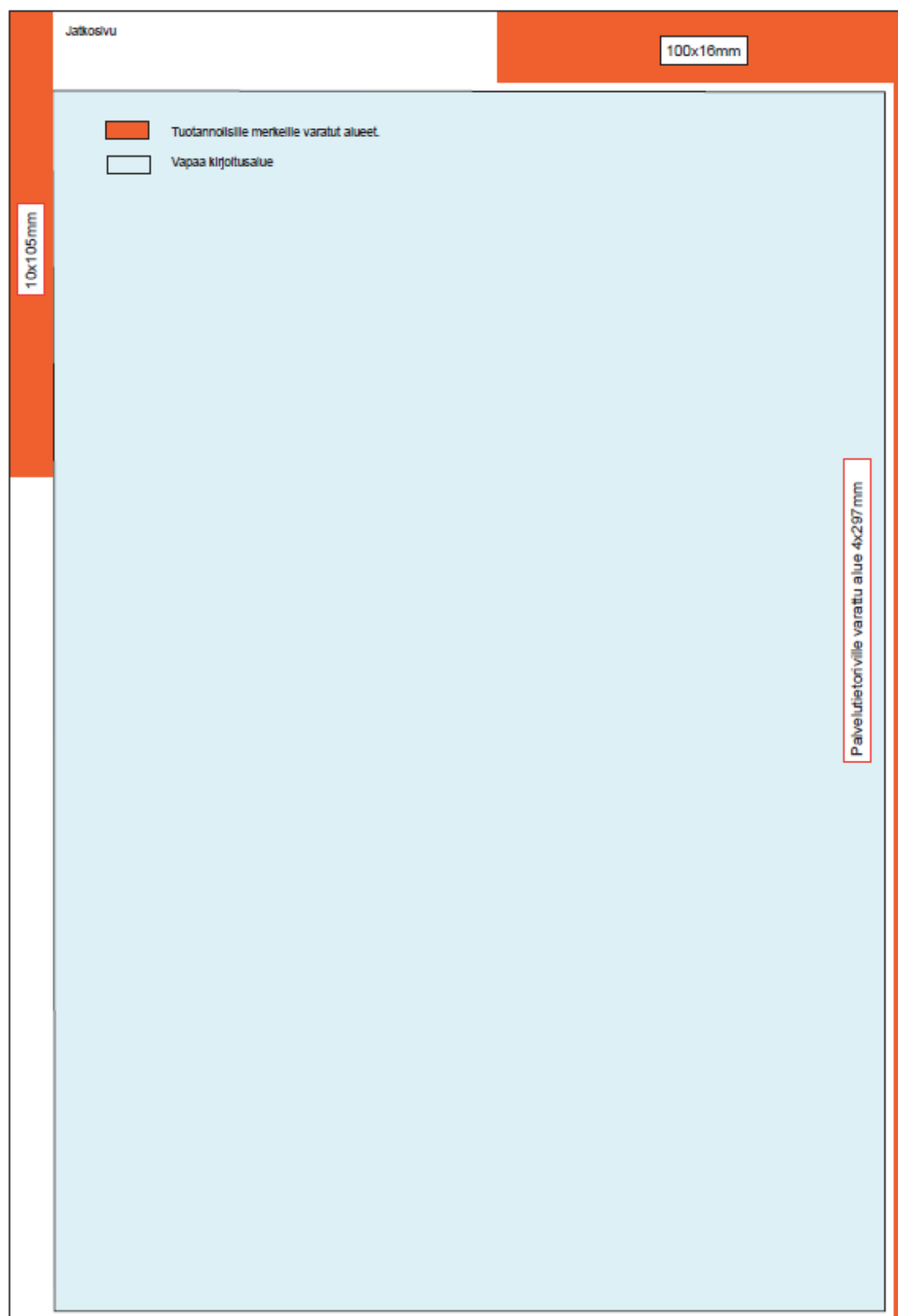
Itella HelpDesk provides help with respect to iPost customers' production issues 24 hours a day, 7 days a week. Contact details: Itella HelpDesk 24/7, service number +358 (0)20 452 9348, [helpdesk@itella.net](mailto:helpdesk@itella.net).

### **5.2 Reserved Areas**

Letters must be produced in such a way that areas reserved for productional markings are left empty. Any additional pages must also take note of the areas reserved for productional markings. Itella will check the areas reserved for productional markings by running white bars on those areas during testing and the actual production. The customer must check the test material to ensure that the actual text is not covered and that productional areas are left for enveloping stamps.

See the attached model of areas reserved for productional markings on a letter's front and additional pages.





### 5.3 Requirements for a Letter's Address Field

The address field must always be white. The addressee's address must be readable in full through the window panel so that the address markings may not slip beyond the panel.

The character size for the address is 2.2–5.5 millimetres (font size 10–12). In the address field, the address type font may not be *italic* or **bold**. The characters in the address may not touch each other. It is advisable that all address information for the addressee be written in UPPER CASE LETTERS. Address information should be written in a font showing the difference between the numbers 6, 8, and 9 clearly, since these digits can easily be confused with one another when read optically.

#### Marking the Address

To enable successful optical reading, it is important that the address rows are in the correct order. The addressee's address information must be divided into six rows:

- Row 0: other information on the addressee: title, customer code, subscription code or other customer-related information
- Row 1: addressee
- Row 2: supplement to the addressee's name (organisational unit, department, office, processed by, occupant of the apartment, c/o etc.)
- Row 3: Spare row, not recognised by the automatic sorting machine (if required, this row can include the addressee's street address, even if the item is sent to the addressee's P.O. Box address)
- Row 4: Exact delivery address (street address, P.O. Box address etc.)
- Row 5: Postal code and town/city (post office)

Example of a correct address:

1234/54  
COMPANY PLC  
MATTHEW SMITH  
COMPANY ALLEY 5  
P.O. Box 5  
FI-00101 HELSINKI

For more information, see the Guide to Designing Letters Intended for Machine Sorting at <http://www.itella.fi/hinnatjaohjeet/kasittelyvaihtoehto/konelajittelu.html> or <http://www.itella.fi/english/pricesandinstructions/handlingoptions/machinesorting.html>

### 5.4 Tests

Testing is always compulsory upon the introduction of the service. Testing must also be performed when the application producing PDFs is modified, e.g. by a version update or the introduction of a new form template. Black and white testing material will be printed on the working day following its arrival, at the latest. Itella will deliver colour test material printouts to the customer in 3-4 working days following its arrival.

The customer can test the suitability of the PDF-material also by sending himself a letter/-s. Letters are then invoiced normally.

Prior to testing, the customer will send a notification by e-mail to [info@itella.com](mailto:info@itella.com) including the following details:

- iPost PDF customer ID
- The FTP directory user ID of the directory to which the material is delivered for testing
- Whether the material is sent zipped or as single PDF files
- Contact details for delivery of the test material.

The recommended size of testing material is approximately 10 letters. The following points will be checked in the testing process:

- Data transmission test upon the first transmission
- File version
- Performance of PDF material
- Printout quality
- Fonts
- In connection with testing, a white bar will be printed in areas reserved for production markings to ensure that no letter text is printed in these areas, in order to leave them free for enveloping markings.

Itella will deliver the test material printouts to the customer and notify of any modification needs simultaneously.

## 6 COUNTRY CODE IN IPOST PDF SERVICE

The country codes are in accordance with the international ISO 3166 standard. They consist of two characters written in capital letters. All ISO 3166 standard country codes are available at <http://www.iso.org/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html>

Domestic		Other European countries, VAT 0%:	
Finland, VAT 22%	FI	Albania	AL
Åland, VAT 0%	AX	Andorra	AD
<b>EU countries, VAT 22%:</b>		Bosnia-Herzegovina	BA
Netherlands	NL	Gibraltar	GI
Belgium	BE	Greenland	GL
Bulgaria	BG	Iceland	IS
Spain	ES	Croatia	HR
Ireland	IE	Liechtenstein	LI
Great Britain and Northern Ireland	GB	Macedonia	MK
Italy	IT	Montenegro	ME
Austria	AT	Moldova	MD
Greece	GR	Monaco	MC
Cyprus	CY	Norway	NO
Latvia	LV	San Marino	SM
Lithuania	LT	Serbia	RS
Luxembourg	LU	Switzerland	CH
Malta	MT	Turkey	TR
Portugal	PT	Ukraine	UA
Poland	PL	Belarus	BY
France	FR	Vatican	VA
Romania	RO	Russia	RU
Sweden	SE		
Germany	DE		
Slovakia	SK		
Slovenia	SI		
Denmark	DK		
Czech Republic	CZ		
Hungary	HU	<b>Other countries, VAT 0%:</b>	
Estonia	EE	Australia	AU
		U.S.A.	US
		<b>All other countries, VAT 0%:</b>	<b>XX</b>
<p>The country codes comply with the international ISO 3166 standard. They consist of two characters written in capital letters. All ISO 3166 standard country codes are available at <a href="http://www.iso.org/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html">http://www.iso.org/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html</a></p>			

## 7 SENDING FILES

The customer will be provided with a user ID and password used to establish an FTP/SFTP connection and to transfer files from the customer to Itella's server. Furthermore, the FTP user ID comprises 8-12 characters and includes both letters and numbers. The 12-character-long password is generated by the system and includes both numbers and capital and lower case letters (different from the iPost PDF password).

The customer is responsible for file transfer and its costs. Files can be sent to Itella by line transmission (24 hours a day). For PDF files, the file transfer is a binary transaction.

The PDF files are transferred to a subdirectory created for this purpose under the FTP/SFTP user ID.

### 7.1.1 Network

#### Connection protocol:

##### FTP / TCP-IP

IP address:	82.199.225.10
Other:	Connection is always opened with a separate communication contract. The customer is allocated its own FTP user ID.

### 7.1.2 Network, encrypted connections

#### Connection protocol:

##### SFTP (SSH2)

IP address:	82.199.225.43
Other:	Always opened with a separate communication contract.

##### VPN (FTP protocol)

IP address:	82.199.225.10
Other:	Always opened with a separate communication contract.

## 7.2 Communication Acknowledgement

You can order an automatic e-mail acknowledgement for a successful FTP/SFTP data transfer informing of the file's time of arrival and size. You can order the service from [info@itella.com](mailto:info@itella.com). When ordering, you are required to give the FTP/SFTP ID and the e-mail addresses to which the acknowledgement is sent. The acknowledgement can be sent to 1-3 e-mail addresses. This service is free of charge but its implementation is charged for in accordance with the price list.

The sender can also retrieve the report file from Itella's server from the LOG directory under the FTP/SFTP ID. The customer will manage the file and be responsible for its deletion. If the customer will not delete the file itself, it will be deleted by Itella at regular intervals. The service is subject to a charge according to the price list and can be ordered from [info@itella.com](mailto:info@itella.com).



## 8 DATA SECURITY

Itella guarantees that all work ordered by customers will be processed respecting secrecy of insurance, telecommunications, post, correspondence and banking and in accordance with the interpretations of the Data Protection Ombudsman and the data security policy of Finland Post Group. Finland Post Group's data security policy, observed within Itella, applies to Itella's subsidiaries. Data security is developed according to ISO/BS 17799 and SoGP (Standard of Good Practice/Information Security Forum).

All working premises are electronically monitored and staff have passes enabling physical access to different areas. All employees have signed non-disclosure agreements.

Data transfer is based on standardised data transmission methods, and fully secured transmission where necessary.

Access to data systems is limited via a firewall and user IDs. Rights (maintenance, operating etc.) granted to different user groups are restricted and monitored.

The software used is updated and correctly configured and hardware is physically protected.

Risk identifications and analyses are conducted at a minimum interval of two years. If necessary, the customer can perform inspections in a separately agreed manner to verify data security, privacy protection or any other factor affecting service quality. Itella must provide and submit an account of any shortcomings and errors to the customer without delay. The customer's staff can also participate in inspections, having provided Itella with a confidentiality agreement.

### 8.1 Handling and Printing of iPost PDF Material

The service assembles files sent by customers into large output batches, based on which letters are sorted for output by order of the recipients' postal codes. Our offices in Helsinki, Tampere and Oulu print out and envelope the letters of their postal code areas. Data communications between offices use our own closed connections.

### 8.2 iPost PDF Customer codes and Passwords

The customer will be issued with a six-character-long iPost PDF customer code for the iPost service. The code will begin with the letter P and include a four-character-long password that can contain both numbers and capital and lower case letters.

The password can be changed upon the customer's request. The customer can send a password change request to [info@itella.com](mailto:info@itella.com), and the new password will be sent as Priority class letter to the customer's contact person specified in the customer register.



## 9 MATERIALS USED IN THE SERVICE

Paper used in iPost PDF:

- 70 or 80 g / m<sup>2</sup>, blank A4 (210 x 297mm)
- Paper shift during output, max. +-2mm.
- ISO 9001, 9706, 14001, Nordic Environmental label
- Low emission during production, chlorine free bleached, 100% recyclable

Envelopes used for iPost PDF:

- Rounded flap style, with window panel, size either C4 or C5
- The envelopes have an inside tint to prevent reading through the envelope
- On the front page, visible through the window panel, only the so-called I code and/or corresponding barcode can be printed in addition to address details
- Because the actual text must not be visible through the window panel on the address page, the text must start below that point.

When continuation pages are used in printing, the customer should take account of the position of the envelope window panel in form design, to prevent the printing of any data defined as confidential under data protection legislation where it can be viewed through the window.

Envelope size is automatically selected according to the number of sheets in the letter. A maximum of 9 sheets will be enveloped inside a C5 envelope and 10–40 inside a C4 envelope. Letters including over 40 sheets are enveloped manually in a so-called bag envelope or packaged in a box.

## APPENDICES

iPost schema design instructions  
Letterbundle\_V0x4 XML 20071106b.zip