Transport for London





Electronic Procure-to-Pay (eP2P) Vendor Handbook



Document Scope

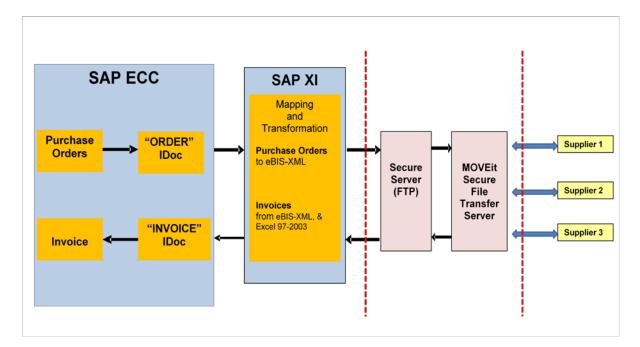
Welcome to the Vendor Handbook on the Electronic Procure-to-Pay (eP2P) process supported by Transport for London (TfL).

This document provides guidance and information relating to the eP2P process for vendors to TfL and the Greater London Authority (GLA).

TfL's eP2P solution enables purchase orders to be submitted to vendors electronically and automatically receives and processes vendor invoices that are received in a supported electronic file format. In addition, invoice response files can also be generated and issued to the vendor. Four separate notifications confirm whether an invoice file has been successfully received, processed successfully or failed to process and finally, cleared for payment.

Detailed technical and functional instructions are contained within this handbook, including:

- Connecting to TfL's MOVEit server to exchange files
- Purchase Order file format
- Invoice file formats
- PunchOut catalogue connectivity with the TfL SAP SRM system



The diagram below provides a high level overview of TfL's eP2P solution



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1 eP2P Solution Overview

TfL's eP2P solution enables purchase orders and invoices to be exchanged with vendors in **eBIS-XML** format.

Vendors with systems that are unable to integrate with XML format files can submit invoices in Microsoft Excel (97-2003) format.

These vendors can continue to receive purchase orders in 'traditional' formats (e.g. via email (pdf), post or fax), whilst submitting invoices in one of the above electronic formats. This allows vendors with varying technical capabilities to participate.

A basic requirement is that you are able to provide a *static* Internet Protocol (IP) address. If you don't currently have a static IP address, you can obtain one from your Internet Service Provider.

Connecting to the TfL MOVEit server

Connection to the eP2P Solution can only be established using one of the following secure file transfer protocols:

- sFTP, or
- https

NB:

- Connections via sFTP require a Username, Password and a public key. (TfL will advise the vendor of the Username and Password to be used. The initial key will be accepted by TfL - this must be used for all future connections).
- https connections can only be made using a web browser and by manually logging on to TfL's MOVEit secure file transfer server.



Supplier-hosted catalogues

To compliment the eP2P solution, TfL's SAP eProcurement system can integrate with web-enabled supplier catalogues via the Open Catalogue Interface (OCI) protocol.

This has a number of advantages, including:

- Accurate pricing, stock availability and product information is obtained directly from the supplier-hosted catalogue for all items
- Allows the correct product and pricing data to be exchanged on purchase orders and invoices
- Enables auto processing of TfL purchase orders, supplier's sales orders and invoices

The supplier must prepare and validate a "PunchOut" catalogue site that displays TfL specific items and pricing in conjunction with TfL Commercial Procurement.

The '<u>Electronic Supplier Catalogues</u>' section within this document details the requirements for integrating TfL's SAP eProcurement system with supplier-hosted catalogues over the internet.



2 Supplier On-boarding process

Step 1: Complete Supplier Questionnaire

The questionnaire captures specific technical information which enables TfL to establish whether the vendor is able to participate in the eP2P process.

The following mandatory information is required:

- > A static IP address
- > Confirmation of the protocol to be used to connect to TfL (sFTP or https)

Step 2: TfL technical set-up

Once this information has been verified, TfL will complete the following tasks:

- Update TfL's external facing firewall to enable a connection from the vendor's network or computer to MOVEit from the static IP address provided
- Create a MOVEit account and provide the vendor with their username and password details - these details should be kept secure.

Changes may also be required to a vendor's firewall to allow connection to TfL's MOVEit secure file transfer server.

The external facing IP address for our MOVEit secure server is 79.141.46.65.

The URL for connecting via https is:

https://mft.tfl.gov.uk/MOVEitdmz or https://79.141.46.65/MOVEitdmz

Step 3: Testing cycle

A number of tests need to be performed to confirm whether invoice files can be successfully uploaded and correctly processed by TfL's SAP system.

- > Vendor to confirm they can connect and log on to MOVEit.
- TfL to provide 3 test purchase orders (electronically where relevant):
 - o PO1: Single Item
 - PO2: Multi-Line (<10 items)
 - PO3: Multi-Line (>10 items)



- > Vendor to submit electronic invoice files in the agreed format:
- o PO1: Single Item (Invoice in full)
- PO2: Multi-Line (<10 items) Partial Invoice Items (10 & 20 only)
- PO3: Multi-Line (>10 items) Invoice <u>All</u> items in full
- Where the vendor has chosen to receive invoice response files, these are to be provided by TfL by way of example. Invoice response files are generated upon:
- o Successful receipt of an invoice file
- Successful (or failed) processing of an invoice file
- Payment clearing for an invoice
- TfL /Vendor: End-to-End Network Test (If purchase orders are to be exchanged electronically, a test PO file will be dropped outbound onto FtP Host) – confirm vendor can collect.
- Vendor: Send Credit Notes for all items invoiced in PO1, PO2 & PO3.

Once the test invoice files have been created and validated against the file format specifications, they should be emailed to <u>etrading@tfl.gov.uk</u>

Step 4: Go-live

Once test files have been successfully exchanged and validated by TfL and the vendor, a go-live date can be agreed.

After go-live, for any changes that are required by the vendor (e.g. change of IP address or file format), timeframes must be agreed by both parties in order to make the necessary technical changes to ensure continuity of service.

Please contact <u>etrading@tfl.gov.uk</u> for any technical change requirements.



3 File Format Specifications

This section contains the detailed specifications of the purchase order and invoice file formats supported by the eP2P solution.

Sample Purchase Order and Invoice file templates are included within the Supplier On-boarding pack.

3.1 Purchase Order eBIS-XML Files

3.1.1 File naming convention

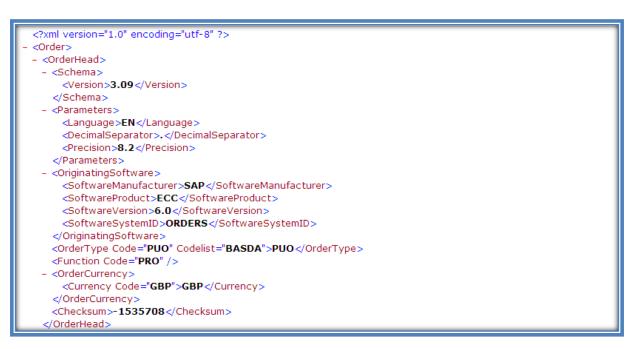
The file naming convention for Purchase Order files is:

E_ORDERS_XXXXXXXXXXXXXXXYYYYMMDD_HHMMSS-SSS.xml



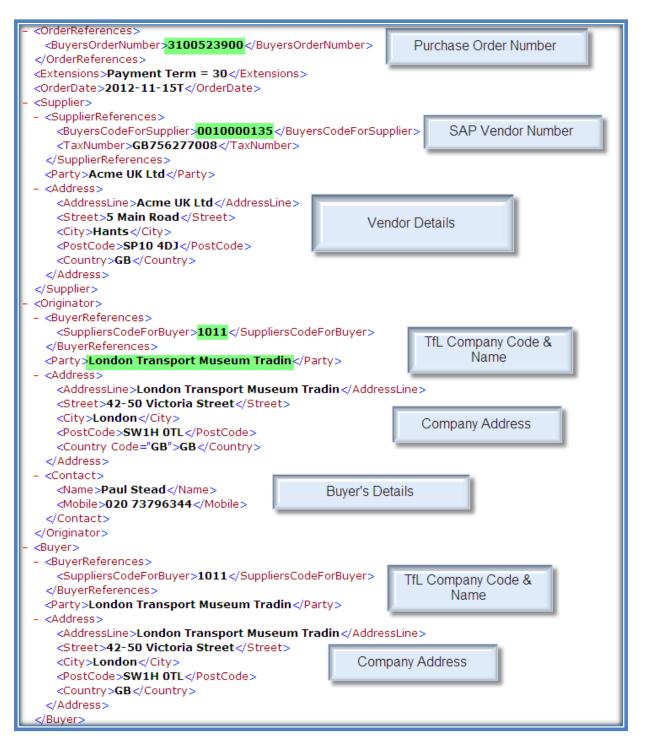
3.1.2 Purchase Order eBIS-XML file – Annotated screen-shots

Order Header





Purchase Order Header Details

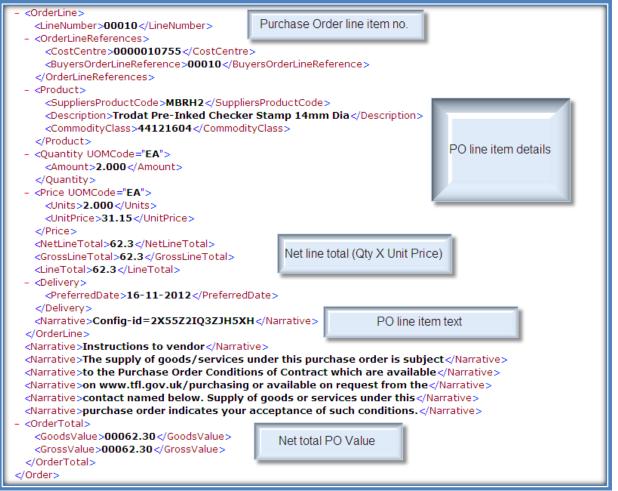




Purchase Order Header Details (Cont.)

- <delivery></delivery>	
– <deliverto></deliverto>	
<delivertoreferences></delivertoreferences>	
<party>TfL Corp.</party>	
- <address></address>	
<addressline>TfL Corp.</addressline>	Ship-to address details for goods
<addressline>5-Zone R4</addressline>	delivery
<street>14 Pier Walk</street>	derivery
<city>London</city>	
<postcode>SE10 0ES</postcode>	
<country>GB</country>	
<invoicetox <invoicetoreferences></invoicetoreferences></invoicetox 	
<party>London Transport Museum Tradin- <address></address></party>	
	Invoice Address
<addressline>London Transport Museum Tradi</addressline>	in
<street>42-50 Victoria Street</street>	
<city>London</city>	
<postcode>SW1H 0TL</postcode>	
<country>GB</country>	

Purchase Order Item Details/ Total Order Value





3.1.3 eBIS-XML Purchase Order File Design Specifications & Mapping

Parent segment	Segment field	Width	Example Value	Comment
/Order/OrderHead/OrignatingSoftware/	SoftwareSystemID	6	ORDERS	Value ORDERS when a new PO is sent
/Order/OrderHead/OrderType/	Code	3	PUO	Order Type Codelist="BASDA" If the Purchase Order type is a
				<pre>'Framework Order' (FO): >> eBIS orderType (/Order/OrderHead/OrderType/) = BLO (Blanket Order) If the Purchase Order type is a 'Delivery Request' (ZDR): >> eBIS orderType = CAO (Call Off Order)</pre>
				If the Purchase Order type is anything Else, then eBIS orderType = PUO (Purchase Order)
/Order/OrderHead/Function/	Code	3	PRO	Function - Codelist="BASDA"
/Order/OrderHead/OrderCurrency/Curren cy/	Code	3	GBP	Currency (always GBP)
/Order/OrderHead/OrderCurrency/	Checksum	20	-3306894	Calculated based on the data in the file (for data completeness purposes only)
/Order/OrderReferences/	BuyersOrderNumber	10	30000797 92	TfL Purchase Order number
/Order/OrderReferences/Extensions (Payment Term)	Payment Term	4	Payment Term = 30	Payment Term
/Order/	OrderDate	10	2010-10- 06	Purchase Order Date Format YYYY-MM-DD
/Order/Supplier/SupplierReferences/	BuyersCodeForSupplier	10	10000504	Supplier Number
/Order/Supplier/SupplierReferences/	TaxNumber	20	GBXXXXX XXXX	Supplier VAT number
/Order/Supplier/	Party	40	Test Supplier	Supplier Name
/Order/Supplier/Address/	AddressLine	60	Hutson Road	
/Order/Supplier/Address/	Street	60	22,	Supplier Address details
/Order/Supplier/Address/	City	40	London	
/Order/Supplier/Address/	PostCode	10	XX1 4XX	
/Order/Supplier/Address/	Country	2	GB	Til Company Code
/Order/Originator/BuyerReferences/	SuppliersCodeForBuyer	3 40	1005 London	TfL Company Code
/Order/Originator/	Party		Undergrou nd Ltd	TfL Company Name
/Order/Originator/Address/	AddressLine	60	London Undergrou nd Ltd	Ordering Address details
/Order/Originator/Address/	Street	60	1	
/Order/Originator/Address/	City	40	London	Ordering Address details
/Order/Originator/Address/	PostCode	10	W1	Ordening Address details
/Order/Originator/Address/	Country	2	GB	
/Order/Originator/	Name	40	Rob Smith	Purchaser
/Order/Originator/	Mobile	30	020 7126 2508	Purchaser's Phone No.
/Order/Buyer/BuyerReferences/	SuppliersCodeForBuyer	4	1005	TfL Company Code

Transport for London



Parent segment	Segment field	Width	Example Value	Comment
/Order/Buyer/	Party	40	London Undergrou nd Ltd	TfL Company Name
/Order/Buyer/Address/	AddressLine	60	London Undergrou nd Ltd	Repeated for Street2 and Care Of
/Order/Buyer/Address/	Street	60	1	
/Order/Buyer/Address/	City	40	London	
/Order/Buyer/Address/	PostCode	10	W1	Buyer Address details
/Order/Buyer/Address/Country/	Code	2	GB	
/Order/Delivery/DeliverTo/Party	Party	40	LUL	
/Order/Delivery/DeliverTo/Address/	AddressLine	60	237-239 Oxford Street	
/Order/Delivery/DeliverTo/Address/	Street	60	1	Delivery address details
/Order/Delivery/DeliverTo/Address/	City	40	London	
/Order/Delivery/DeliverTo/Address/	PostCode	10	W1D 2LS	1
/Order/Delivery/DeliverTo/Address/Count ry/	Code	2	GB	
/Order/InvoiceTo/	Party	40	LUL	
/Order/InvoiceTo/Address/	AddressLine	60	237-239 Oxford Street	lauria Table da M
/Order/InvoiceTo/Address/	Street	60	1	Invoice To Address details
/Order/InvoiceTo/Address/	City	40	London]
/Order/InvoiceTo/Address/	PostCode	10	W1D 2LS	
/Order/InvoiceTo/Address/Country/	Code	2	GB	
/Order/OrderTotal/	GoodsValue	11	10000	Order Totals in GBP
/Order/OrderTotal/	GrossValue	11	10000	
/Order/OrderLine[1]/	LineNumber	5	10	Item No (Item number for Purchase Order, normally multiple of 10)
/Order/OrderLine[1]/	Action	10	Cancel	Cancel >> When Item is Deleted / Blocked, Blank value for other cases
/Order/OrderLine[1]/OrderLineReference s/	CostCentre	25	25760	Cost Centre (Cost Centre for the Purchase order item)
/Order/OrderLine[1]/OrderLineReference s/	BuyersOrderLineRefere nce	5	10	Item No (Item number for Purchase Order, normally multiple of 10)
/Order/OrderLine[1]/Product/	SuppliersProductCode	35	7901251	Supplier Part no (Part number for the goods on supplier system)
/Order/OrderLine[1]/Product/	Description	40	Laptop	Item Description
/Order/OrderLine[1]/Product/	CommodityClass	10	80120000	Product Category
/Order/OrderLine[1]/Quantity/	UOMCode	3	EA	UoM (Unit of measurement, example EA - Each)
/Order/OrderLine[1]/Quantity/	Amount	11	5000	PO Qty (Attrs) (Qty normally without decimal point)
/Order/OrderLine[1]/Price/	UOMCode	3	EA	UoM (Unit of measurement, example EA - Each)
/Order/OrderLine[1]/Price/	Units	13	5000	PO Qty (Attrs) (Qty normally without decimal point)
/Order/OrderLine[1]/Price/	UnitPrice	5	1	Unit Price (Price for a unit)
/Order/OrderLine[1]/	NetLineTotal	11	5000	Net Value for item (Qty x Price)
/Order/OrderLine[1]/	GrossLineTotal	11	5000	Net Value + VAT (VAT is determined only at the time of Invoice to not sent as a part of PO)
/Order/OrderLine[1]/	LineTotal	11	5000	Same as Gross Line Total
/Order/OrderLine[1]/ /Order	Narrative Narrative	72 72	Item Text Header	Any Additional Line Item Text Additional Header Text
/Order/OrderTotal	GoodsValue	11	Text 5000	Goods Value (sum of all the items)
/Order/OrderTotal	GrossValue	11	5000	Same as Goods Value
/Order/Delivery	PreferredDate	10	23-08-	Delivery Date
	riciciicuDale	10	2010	Delivery Date



3.2 Invoice Files

3.2.1 File naming convention

The following file naming convention must be adopted for invoices.

This ensures multiple invoice files that are produced and submitted on the same day can be identified by the unique file name.



- One file should be submitted <u>per invoice</u>.
- If an invoice file is submitted with the same name as a previous invoice, the original file will be overwritten.

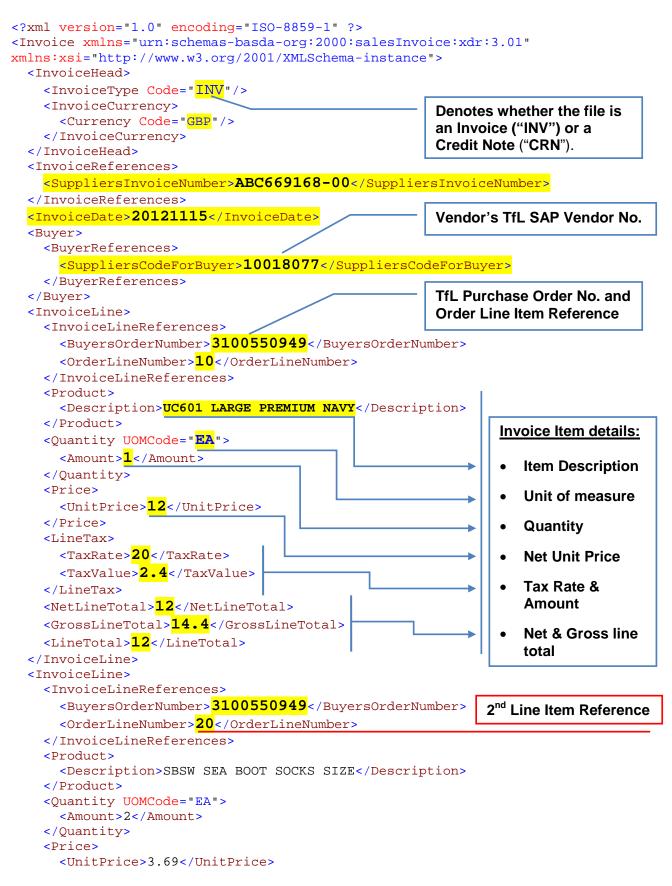
File naming must be as specified below: NO SPACES

File Format	Invoice Naming Convention	File extension	Example
eBIS XML Format	TFLeBISXXXXXXXXXYYYYMMDDHHMMSSSSS.xml	xml	TFLeBIS001000072220130214105250061.xml
Excel 97- 2003 Format	TFLEXCLXXXXXXXXXXYYYYMMDDHHMMSSSSS.xls	xls	TFLEXCL001000072220130214105250061.xls

Key:	
XXXXXXXX	Your reference/ invoice number
YYYYMMDD	Date of file creation
HHMMSS-SSS	Time of file creation (in milliseconds)



3.2.2 eBIS-XML Invoice – Annotated example of mandatory technical data segments to be configured in the vendor's system.





<linetax></linetax>	3 rd Line Item Reference
<taxrate>20</taxrate>	
<taxkate>20</taxkate> <taxvalue>1.48</taxvalue>	NP. Tfl. purchase order
	NB: TfL purchase order
<pre> 7.38</pre>	line item numbers are
<pre><netlinetotal>7.38</netlinetotal> <grosslinetotal>8.86</grosslinetotal></pre>	incremented in units of
<pre><grosslinetotal>8.86</grosslinetotal></pre>	10, i.e. 10, 20, 30 (and
	NOT 1, 2, 3).
	These must be
<invoiceline> <invoicelinereferences></invoicelinereferences></invoiceline>	correctly quoted on the
<pre><invoicelinereferences> <buyersordernumber>3100550949</buyersordernumber></invoicelinereferences></pre>	
<pre><orderlinenumber></orderlinenumber></pre> 30	
<product></product>	
<pre><description>UC201 NAVY LARGE SWEAT Shirt</description></pre>	cription>
<quantity uomcode="EA"> <amount> 2</amount></quantity>	
<price></price>	
<unitprice>9.6</unitprice>	
<linetax></linetax>	
<taxrate>20</taxrate>	- NB: Net Line Total =
<taxvalue>3.84</taxvalue>	
	Qty Amount X Unit Price
<netlinetotal><mark>19.2</mark></netlinetotal>	
<grosslinetotal>23.04</grosslinetotal>	
<linetotal>19.2</linetotal>	
<taxsubtotal></taxsubtotal>	
<taxrate>20.00</taxrate>	
<taxatrate>7.72</taxatrate>	
<invoicetotal></invoicetotal>	
<taxtotal>7.72</taxtotal>	
<netpaymenttotal>38.58</netpaymenttotal>	
<pre><grosspaymenttotal>46.3</grosspaymenttotal></pre>	Invoice Total:
	Pay careful attention to
	-
	the Tax, Net Amount and
	Gross Amount breakdown

Please Note:

The above example invoice file does not contain the <u>vendor name</u>, address and VAT number details, or the <u>"Sold To" company details</u>. These <u>must</u> be included in the Header section of your invoice files for

These <u>must</u> be included in the Header section of your invoice files for reference and to comply with legal requirements.

The <u>invoice design specifications</u> section details where this information should be specified in the file and the segments are shown in the eBIS-XML invoice sample file contained within the Supplier Onboarding pack.

3.2.3 eBIS-XML Invoice Design Specifications & Mapping

Structure	Name	Mandatory or Optional	Length	ltem Header	Example Value	Segment	Description
VAT Registration	Customer Tax Number	For Reference only	11	Header	GB000000000	/Invoice/Buyer/BuyerReferences/TaxNumber	Format - GBXXXXXXXXX, TfLs VAT Reg Number
VAT Registration	Vendor Tax Number	For Reference only	11	Header	GB000000000	/Invoice/Supplier/SupplierReferences/TaxNumber	Format - GBXXXXXXXXX, Suppliers VAT Reg Number
Header Data	Currency	Mandatory	5	ltem	GBP	/Invoice/InvoiceHead/InvoiceCurrency/Currency/@Code	
Header Data	Invoice Type	Mandatory	4	Header	INV	/Invoice/InvoiceHead/InvoiceType/@Code	This indicates if the file is an Invoice or Credit. INV - Invoice and CRN - Cr Note
Header Data	Supplier Number	Mandatory	10	Header	1000000	/Invoice/Buyer/BuyerReferences/SuppliersCodeForBuyer	This is your unique account as specified by TfL systems, (supplier number)
Header Data	Invoice Date	Mandatory	10	Header	20070202	/Invoice/InvoiceDate	This is your tax point date or invoice/credit note date . Date Format - YYYYMMDD
Header Data	Supplier Invoice Number	Mandatory	16	Header	eBIS_Test	/Invoice/InvoiceReferences/SuppliersInvoiceNumber	This is your unique invoice/credit note number.
Address Data	Supplier Address	Mandatory		Header			Table with Partner Function LF
Address Data	Ordering Address	Optional		Header			Table with Partner Function AG
Address Data	Delivery Address	Optional		Header			Table with Partner Function WE



Structure	Name	Mandatory or Optional	Length	ltem Header	Example Value	Segment	Description
Address Data	Invoice recipient Address	Mandatory		Header			Table with Partner Function AG
ltem Data	Qty	Mandatory	13	ltem	50	/Invoice/InvoiceLine/Quantity/Amount	This is the quantity of items invoiced and should not exceed the quantity stipulated on the Purchase Order Line
ltem Data	Price	Mandatory	13	ltem	2.38	/Invoice/InvoiceLine/Price/UnitPrice	Price per UoM as specified on the Purchase Order
ltem Data	UoM	Mandatory	3	ltem	EA	/Invoice/InvoiceLine/Quantity/@UOMCode	Unit of Measure as specified on the Purchase Order. Typically this would be EA indicating Each
ltem Data	Item Text	Mandatory	25	ltem	Printer	/Invoice/InvoiceLine/Product/Description	Description of goods or services invoiced as indicated on the Purchase Order
ltem Data	Supplier Product Number	Optional	35	ltem	TEX08134	/Invoice/InvoiceLine/Product/SuppliersProductCode	This field should contain the catalogue number, part number or product code as specified on the Purchase Order
ltem Data	Item Net value	Mandatory	18	ltem	119	/Invoice/InvoiceLine/NetLineTotal	This field is calculated using the Qty & Price data
ltem Data	Item Gross Value	Mandatory	18	ltem	139.83	/Invoice/InvoiceLine/GrossLineTotal	This field is calculated using the Net Value & VAT Value data
Item Data	Item VAT Rate	Mandatory	17	ltem	17.5	/Invoice/InvoiceLine/LineTax/TaxRate	This field is the chargeable VAT rate (i.e. 20) for invoices with mixed VAT rates please ensure to enter the correct rate for each line, Do not use %
Reference Data	PO Number	Mandatory for Supported Invoice if Service Entry Sheet no not populated	10	ltem	3000079765	/Invoice/InvoiceLine/InvoiceLineReferences/BuyersOrderNumber	This is the Purchase Order Number you are invoicing



Structure	Name	Mandatory or Optional	Length	ltem Header	Example Value	Segment	Description
Reference Data	PO Item Number	Mandatory for Supported Invoice if Service Entry Sheet no not populated	5	ltem	10	/Invoice/InvoiceLine/InvoiceLineReferences/OrderLineNumber	This is the Line number of our Piurchase Order. Typically Lines are 5 numeric starting with 00010 with increments of 10
Reference Data	Delivery Note	Delivery Note number is a supplier Delivery note number, this field should only be populated only if invoice need to be reference at Delivery Note number	16	Item	1000945290	/Invoice/InvoiceLine/InvoiceLineReferences/DeliveryNoteNumber	This field should only be populated if invoice need to be reference at Delivery Note number, to use this functionality SAP purchase order need to be setup accordingly (Additional flag need to be set).
Reference Data	GL Account	Mandatory for UnSupported Invoice if not maintained in TFL customization	10	Item	533010	/Invoice/InvoiceLine/InvoiceLineReferences/GeneralLedgerCode	Not required for Purchase Order related invoices
Reference Data	Cost Object	Mandatory for UnSupported Invoice.	27	Item	IO-3500022	/Invoice/InvoiceLine/InvoiceLineReferences/CostCentre	Not required for Purchase Order related invoices Following Prefix need to be used with Cost Objects: Cost centre >> Prefix CC- >> Example CC-120003, Internal Order >> Prefix IO- >> Example IO-3500022, WBS Element >> Prefix WBS- >> Example WBS-SC01.0123.23



Structure	Name	Mandatory or Optional	Length	ltem Header	Example Value	Segment	Description
Reference Data	Service Entry Sheet no	Service entry sheet is a TfL SES number. Mandatory for Supported Invoice if PO and PO Item number no not populated then >> PO number / item number, is identified from Service entry sheet.	10	Item	1000945290	/Invoice/Extensions	This field should only be populated if you have been given a Service Entry Sheet number to quote by the buyer.
VAT Sub Totals	VAT Rate	Mandatory	17	ltem	17.5	/Invoice/TaxSubTotal/TaxRate	This field is the chargeable VAT rate (i.e 20) for invoices with mixed VAT rates this should repeate for every rate, Do not use % sign
VAT Sub Totals	VAT Value	Mandatory	18	ltem	20.83	/Invoice/TaxSubTotal/TaxAtRate	Total Tax ammount for one Tax Rate, for invoices with mixed VAT rates this should repeate for every rate, if invoice is not a mixed VAT then same as Total VAT
Totals	Total Net value	Mandatory	18	All Items Total	119	/Invoice/InvoiceTotal/NetPaymentTotal	Total Net Value
Totals	Total Gross Value	Mandatory	18	All Items Total	139.83	/Invoice/InvoiceTotal/GrossPaymentTotal	Total Gross = Total Net Value + Total Tax
Totals	Total VAT	Mandatory	18	All Items Total	20.83	/Invoice/InvoiceTotal/TaxTotal	Total Tax amount at invoice level

3.2.4 Table for supplier address details (LF: Supplier)

	Key Information	Field Width	Example Value	eBIS Segment
Address Data	Partner function (e.g. sold-to		LF	
	party, ship-to party,)			
	Name 1	40	XYZ Business Supplies	/Invoice/Supplier/Contact/Name
	Name 2	40	1 Office Road	/Invoice/Supplier/Address/AddressLine
	Street and house number 1	60		/Invoice/Supplier/Address/Street
	City	40	London	/Invoice/Supplier/Address/City
	Postal code	10	SW1	/Invoice/Supplier/Address/PostCode
	Country Key	2	UK	/Invoice/Supplier/Address/Country/@Code

3.2.5 Table for Sold-To Party address (Ordering Address) details

	Key Information	Field Width	Example	eBIS Segment
Address Data	Partner function (e.g. sold-to party, ship-to party,)		AG	
	Name 1	40	TFL Corporate	/Invoice/Buyer/Contact/Name
	Name 2	40	eP2P Project	/Invoice/Buyer/Address/AddressLine
	Street and house number 1	60	14 Pier Walk	/Invoice/Buyer/Address/Street
	City	40	LONDON	/Invoice/Buyer/Address/City
	Postal code	10	SE10 9LU	/Invoice/Buyer/Address/PostCode
	Country Key	2	UK	/Invoice/Buyer/Address/Country/@Code



3.2.6 Table for delivery address details

	Key Information	Field Width	Example	eBIS Segment
Address Data	Partner function (e.g. sold-to party, ship- to party,)		WE	
	Name 1	40	London Underground Limited	/Invoice/Delivery/DeliverTo/Contact/Name
	Name 2	40	LUL	/Invoice/Delivery/DeliverTo/Address/AddressLine
	Street and house number 1	60	55 Broadway	/Invoice/Delivery/DeliverTo/Address/Street
	City	40	London	/Invoice/Delivery/DeliverTo/Address/City
	Postal code	10	SW1H OBD	/Invoice/Delivery/DeliverTo/Address/PostCode
	Country Key	2	UK	/Invoice/Delivery/DeliverTo/Address/Country/@Code

<u>NB:</u> This information is just for reference and will not be used for posting the invoice.



3.2.7 Excel 97-2003 Invoice Design Specifications

Included within the Supplier On-boarding pack is a template to assist you with the invoice creation process and a guide to the layout of our Purchase Orders. Additional copies of this template can be requested from the TfL eTrading team, by emailing <u>eTrading@tfl.gov.uk</u>.

The invoice file is an Excel worksheet made up of 24 fields at the invoice header level and 17 fields at the invoice line item level.

The fields at the header level (rows 1 - 10) must be populated. This captures specific information relating to your company and header details of the invoice e.g. invoice date, your reference number and details of the TfL Company you are submitting your invoice to.

The line level (Row 11 onwards) contains 17 fields relating to each line of the invoice. Of these, 7 fields are mandatory and depending on the type of purchase order received, there are additional fields which may also require populating.



- Excel files MUST be saved in Excel Version 97-2003 or earlier
- The file template/ order of the fields on the file must not be changed
- The invoice date must be entered using full-stops **only** as the separator and not "/". (e.g. **19.11.2012**)
- All Items marked with * are referred to in the TfL leaflet "*Help us to pay your invoice on time*", which is included within this on-boarding pack
- The following characters must **<u>not</u>** be entered into any field:

<>,/\?#~@';:[]{}+=_-)(*&^%\$£"!€



3.2.8 Excel 97-2003 Invoice – Example screen-shot

	A	В	С	D	E	F	G	Н							N	0	P	Q
1	Invoice Type	INVO			London Underground		Vendor Account Number		10003460	Invoice h	neader le	vel fie	elds					
3	Currency Supplier Invoice No	GBP 18044			Accounts Payable PO Box 45273		Name Street and house number	Acme Ltd Main Boad										
5	Invoice date	15.11.2012		Street and house number 2	14 Pier Walk		Street and house number 2	50										
6	VAT Rate Total VAT	20 45.39		City Postal code	London SE10 1AJ		City Postal code	Great Yarmouth NR310NL										
8	Total Value	226.96		Country Key	GB		Country Key	GB					l Inve	oice li	ine iter	n fields		
9	Gross	272.35		Company VAT Number	756277006		Vendor's VAT Number		324361055				+				·	
11	Todar Text									6								
,		Supplier Part								-						TfL Material		
12	Item Description Permit to Enter Lift pad	Number 769547	<u>Qty</u> 10		Price 9.98	Net Value 99.80	VAT Rate 20	VAT value	19.96				GL Account	Object	Entry Sheet	No.		Delivery Note 10816
Ī	Inner Station Log Book	769525	8	ca	13.64	109.12	20		21.82	130.94	3100550507	20						10816
15	Line Controller Log Book	769313	4	ea	4.51	18.04	20		3.61	21.65	3100550507	30						10816
17																		



3.2.9 Excel 97-2003 Invoice Design Specifications & Mapping

Structure	Name		length	Alpha/Numeric	Description	Example
Header Field	Invoice Type	М	4	А	This indicates if the file is an Invoice or Credit.	CRME = Credit Note INVO = Invoice
Header Field	Currency	М	5	А	Pre-populated	GBP
Header Field	Supplier Invoice No	М	20	A/N	This is your unique invoice/credit note number.	INV0001
Header Field	Invoice Date	М	10	DD.MM.YYYY Do not use / as the seperator	This is your tax point date or invoice/ credit note date.	01.02.2011
Header Field	VAT Rate	М	17	N Do not use % sign	This field is the chargeable VAT rate (i.e. 20) for invoices with mixed VAT rates this field should remain blank	20
Header Field	Total VAT	М	18	N	Automatically calculated	20.00
Header Field	Total Value	М	18	N	Automatically calculated	100.00
Header Field	Gross	М	18	N		120.00
Header Field	Header Text	М	132	A/N	Any additional information about the invoice may be entered here.	
Header Field	*Company Name	м	30	A/N	This is the name of the TfL Group company you are invoicing as it appears on the Purchase Order (refer to Appendix 6.1.1 table)	London Underground Ltd
Header Field	*Department	М	30	A/N	Pre-populated	Accounts Payable
Header Field	*Street and house number	М	30	A/N	Pre-populated	14 PIER WALK
Header Field	*Street and house no.	М	30	A/N	Pre-populated	NORTH GREENWICH



Structure	Name		length	Alpha/Numeric	Description	Example
Header Field	*City	М	25	A/N	Pre-populated	LONDON
Header Field	*Postal Code	М	10	A/N	Pre-populated	SE10 9LU
Header Field	Country key	Μ	2	A/N	Pre-populated	GBP
Header Field	Company VAT Number	м	20	Ν	This field must contain the VAT Registration Number of the TfL Group company you are invoicing (refer to Appendix 6.1.1 table)	756277008
Header Field	*Vendor Account Number	М	10	Ν	This is your unique account as specified by our systems, (aka supplier number)	12345678
Header Field	Name	Μ	30	A/N	Your company trading name	
Header Field	Street and house number	М	30	A/N	The first line of your company address	
Header Field	Street and house number	М	30	A/N	The second line of your company address	
Header Field	City	М	25	A/N	City	
Header Field	Postal Code	М	10	A/N	Post Code	
Header Field	Country key	М	2	А	Pre-populated	GBP
Header Field	Vendor's VAT Number	М	20	Ν	Your company VAT Registration Number	
Line Level Field	*Item Description	М	40	A/N	Description of goods or services invoiced as indicated on the Purchase Order	Blue Pens
Line Level Field	Supplier Part Number	0	35	A/N	This field should contain the catalogue number, part number or product code as specified on the Purchase Order	PEN B 123

Structure	Name		length	Alpha/Numeric	Description	Example
Line Level Field	*Qty	М	13	Ν	This is the quantity of items invoiced and should not exceed the quantity stipulated on the Purchase Order Line	10
Line Level Field	*UoM	М	3	A/N	Unit of Measure as specified on the Purchase Order. Typically this would be EA indicating Each	EA
Line Level Field	*Price	М	13	Ν	Price per UoM as specified on the Purchase Order	0.10
Line Level Field	*Net Value	М	18	Ν	This field is automatically calculated using the Qty & Price data	100.00
Line Level Field	VAT Rate	М	17	Do not use % sign	This field is the chargeable VAT rate (i.e. 20) for invoices with mixed VAT rates please ensure to enter the correct rate for each line	20
Line Level Field	VAT Value	М	18	Ν	This field is automatically calculated using the Net Value & VAT Rate data	20.00
Line Level Field	Gross Value	М	18	Ν	This field is automatically calculated using the Net Value & VAT Value data	120.00
Line Level Field	*PO Number	М	10	Ν	This is the Purchase Order Number you are invoicing	3012345678
Line Level Field	*PO Item	М	5	Ν	This is the Line number of our Purchase Order. Lines are numeric starting with 10 and increment bv 10 (10, 20, 30).	10



Structure	Name		length	Alpha/Numeric	Description	Example
Line Level Field	GL Account	0	10	Ν	Not required for Purchase Order related invoices	
Line Level Field	Cost Object	0	27	A/N	Not required for Purchase Order related invoices	
Line Level Field	Service Entry Sheet	0	10	Ν	This field should only be populated if you have been given a Service Entry Sheet number to quote by the buyer.	
Line Level Field	TfL Material No.	0	18	Ν	If your Purchase Order is Stock related the Material number must be quoted in this field	
Line Level Field	Item Text	0	50	A/N	This field should remain blank	
Line Level Field	Delivery Note	0	16	Ν	This field should only be populated if you have a Delivery Note number to quote to the buyer	

Please ensure you follow the <u>guidance</u> on the required file naming convention.



In order for the excel file to load into TfL's SAP system, it <u>must be saved in Excel version 97-2003 or earlier (.xls)</u>

The screen-shot below illustrates how to do this using MS Excel 2007:

Save As			• • ? ×
Save As			
Save <u>i</u> n:	Carl SAP Change Requests	💌 😔 ד 🔰	🗙 📑 🎫 -
P: Drive [Public]	1		
My Recent Documents			
🚱 Desktop			
Documents			
S My Computer			
	File name: TfL eTrading Excel Invoice Template v0.6	_	
	Save as type: Excel 97-2003 Workbook	-	
	Excel Workbook		
Too <u>l</u> s -	Excel Macro-Enabled Workbook Excel Binary Workbook		Cancel
	Excel Binary Workbook Excel 97-2003 Workbook		
	XML Data Single File Web Page		
	0.00		



4 Electronic Supplier Catalogues (OCI 4.0)

The Open Catalogue Interface (OCI) connects supplier-hosted catalogues to TFL's SRM system via HTTP over the Internet, allowing product data to be transferred directly from the supplier's catalogue to TFL's eProcurement system.

This allows TfL buyers to access the supplier's catalogue, select items and transfer the product data into the SRM system for follow-on processing to a purchase order.

To integrate a supplier catalogue with TfL's system, the following key points need to be considered:

- **1.** SRM PunchOut works only on OCI 4.0 (Open Catalogue Interface) protocol. The supplier is required to have an OCI compliant catalogue to connect to SAP SRM.
- **2.** Information Exchange: To implement this functionality there will be some exchange of information between supplier and TFL.

Information from the supplier

The following information is required from the supplier to connect to their PunchOut URL:

Information required from Supplier							
Description	Content						
Logon parameters for external catalogue	Specify Parameters required to call-up the external catalogue:						
(Production System)	• URL						
	• Service						
	• Username						
	• Password						
Test Data / Test URL	All test data to be transferred from Test external catalogue interface between the vendor punch out catalogue and SRM Server						
	• URL						
	• Service						
	• Username						
	• Password						



Detailed guidance can be found within the "OCI Business 2 Business" document contained within the On-boarding pack.



The vendor will need information i.e. HTTP method, Return URL, etc. to configure their PunchOut URL.

The vendor must prepare and validate the production Punch-Out site that displays TFL specific items and pricing.

3. OCI data to be passed between the SRM Server and the Service Provider website can only be accommodated via the following standard fields

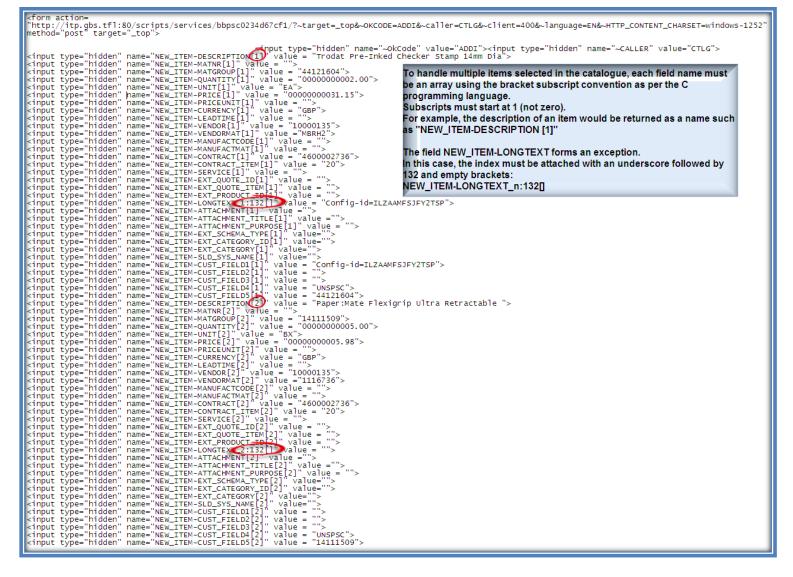
NEW_ITEM-<Field name>[<index>]. The field type is always CHAR.

Field name	Required or Optional	Field Length	Description
NEW_ITEM- DESCRIPTION[n]	Required	40	Description of the item
NEW_ITEM- QUANTITY[n]	Required	15	Item quantity
NEW_ITEM-UNIT[n]	Required	3	Quantity unit for item quantity
NEW_ITEM-PRICE[n]	Required	15	Price of an item per price unit
NEW_ITEM- CURRENCY[n]	Required	5	Item currency
NEW_ITEM- LONGTEXT_n:132[]	Optional	unlimited	Long text for the item
NEW_ITEM- VENDOR[n]	Required	10	TfL SAP vendor number
NEW_ITEM- VENDORMAT[n]	Optional	40	Vendor's product number for the item
NEW_ITEM- MATGROUP[n]	Required	10	SAP material group for the item
NEW_ITEM- CONTRACT[n]	Optional*	10	SAP contract to which the item refers
NEW_ITEM- CONTRACT_ITEM[n]	Optional*	5	Item within the SAP contract

*The following fields are required fields depending on conditions:

• NEW_ITEM-CONTRACT[n] if NEW_ITEM-CONTRACT_ITEM[n] has been used

4.1 Example of the OCI-Compliant HTML Form





5 Help & Support

The following contacts at TfL are able to assist in the event of queries:

Invoices:	Geoff Gibbs FSC Accounts Payable Team Telephone: 0845 303 5100
Purchase Orders:	Ajay Manjdadria

TfL Commercial Procurement Telephone: 020 7126 1680

Please email <u>etrading@tfl.gov.uk</u> with as much information as possible to allow us to investigate and resolve any problems.

Ensure you include:

- File Transaction Invoices, Purchase Orders or both
- In the case of specific file queries, please provide the filename(s) that have been submitted
- Date & time of transaction activity (Approx.)
- Description of issue (incl. error messages)



NB: Invoice file submissions are typically rejected due to:

- **Filenames** not following the recommended naming convention, (e.g. no spaces are allowed).
- File formats being incorrect (e.g. Excel files submitted in a version later than Excel 97 -2003).
- File content certain values are missing or specified incorrectly e.g. dates, purchase order references as well as entry of special characters:

 <l



6 Appendix

6.1 TfL / GLA Company VAT Registration Numbers

Company Name	Vat Registration Number
Transport for London	756276990
Greater London Authority	743811731
Surface Transport	756276990
Public Carriage Office	730270990
Transport Trading Ltd	
TTL Group Property	
London Underground Ltd	
London Bus Services Ltd	
London River Services Ltd	
Victoria Coach Station	756077008
Dial A Ride Ltd	756277008
London Transport Museum Ltd	
LT Museum Trading Ltd	
Docklands Light Railway Ltd	
Rail for London Ltd	
LUL Nominee SSL Ltd	
LUL Nominee BCV Ltd	



6.2 TfL / GLA Company codes

Company Code	Description
1001	TfL Corporate
1002	Surface Transport Corporate
1003	Public Carriage Office
1004	Transport Trading Ltd
1005	London Underground Ltd
1006	London Bus Services Ltd
1007	London River Services Ltd
1008	Victoria Coach Station Ltd
1010	Dial A Ride Ltd
1011	London Transport Museum
1012	Docklands Light Railway Ltd
1020	Rail for London Ltd
1024	LT Museum Trading Ltd
1031	LUL Nominee SSL Ltd
1033	LUL Nominee BCV Ltd
2001	Greater London Authority
2003	GLA Land and Property Ltd