

# 2002 e-commerce survey of business : Value of e-trading by non-financial sector UK businesses<sup>1</sup>

## Introduction

This article contains the second and final stage of results<sup>2</sup> from the experimental 2002 e-commerce survey of UK business<sup>3</sup>.

This is the third annual e-commerce survey. Data validation for this new survey continues to be difficult and the data is still subject to quality improvements involving user consultation. Methodological aspects of the survey are still under consideration and development both within the European Union (EU) and worldwide, in the context of Eurostat and the Organisation for Economic Co-operation and Development (OECD) discussions. The outputs of the e-commerce survey are therefore likely to be under development, and subject to change for the foreseeable future.

The survey questionnaire was revised significantly for the 2002 survey following consultation with firms, UK government users, Eurostat and other EU member states, and building upon the experience of the first two surveys.

Businesses are continuing to experience difficulties in providing estimates of online sales and purchases and ONS is continuing to develop and refine the questionnaire as it gains experience in this area and shares best practice with other countries. The 2001 estimates of e-trading have been revised fairly substantially, and are given in this article. See the Explanatory Notes at the end of this article for further details.

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<sup>1</sup> The methodology for estimating the value of e-activity for the financial sector is being reviewed internationally given measurement issues associated with this sector. All estimates in this article are for firms classified to the non-financial sectors of the Standard Industrial Classification 1992 (SIC(92)).

<sup>2</sup> Estimates of adoption and usage of Information and Communication Technologies (ICTs) were published on 28 October 2003.

<sup>3</sup> The outputs of the e-commerce survey have been redesignated as experimental statistics.

## Background

12,000 businesses of all sizes were sampled for the 2002 survey. The ONS Inter Departmental Business Register (IDBR) was used as the sampling frame. Businesses with less than ten in employment were sampled for the second year.

The survey is part of an EU initiative providing EU-comparable data on e-commerce. The definition of e-commerce used is that agreed by the OECD and the EU: it is the method by which the order is placed which determines whether a transaction is e-commerce – not the payment or delivery channels.

Information and Communication Technologies (ICTs) are defined as the Internet, electronic data interchange (EDI), e-mail, PC-based fax or automated telephone entry. Telephone interaction (person to person) and conventional fax are excluded.

### *Key findings*

- The value of orders received over the Internet by UK non-financial sector businesses increased by 39 per cent between 2001 and 2002, from £16.8bn<sup>4</sup> to £23.3bn
- The business to household share of Internet sales increased from 24 per cent in 2001<sup>4</sup> to 27 per cent in 2002
- The largest share of the value of Internet orders received and placed continued to be for physical products in 2002
- The value of orders placed over the Internet by UK non-financial sector businesses increased by 14 per cent from £20.1bn<sup>4</sup> in 2001 to £22.9bn in 2002
- The Wholesale/ Retail/ Catering/ Travel/ Telecommunications sector continued to be the leader in the value of Internet sales and purchases.

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<sup>4</sup> The 2001 estimate has been revised due to company misreporting and improved data validation procedures. Future revisions may also similarly apply to 2002 estimates. See Explanatory Notes for further details.

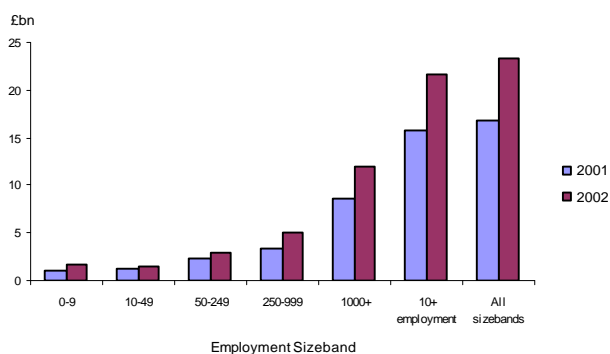
## ORDERS RECEIVED OVER INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTs)

### Value of orders received over the Internet (Table 1)

In 2002, UK non-financial sector businesses received orders over the Internet estimated at a value of £23.3bn. This figure represents 1.2 per cent of total sales by the non-financial sectors of the economy in 2002, and a 39 per cent increase from £16.8bn in 2001<sup>4</sup>.

As in 2001, the value of orders received online increases as the size of businesses increase<sup>5</sup>, with firms with 1000 or more in employment accounting for 52 per cent of the value of online orders received. The 2002 survey indicated an increase from 2001 in the value of online orders received for all sizebands of businesses surveyed.

### Value of Internet orders received by UK non-financial sector businesses, by sizeband, 2001 and 2002



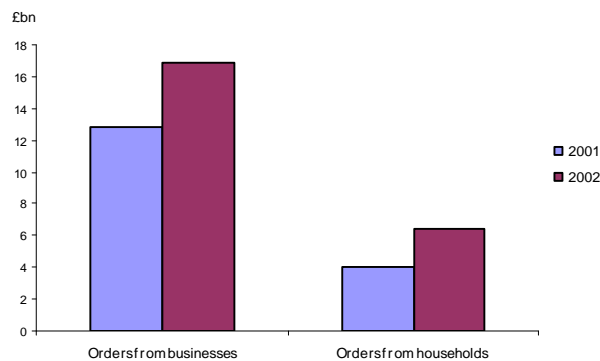
### Value of orders received over the Internet from households and businesses (Table 1)

The value of online orders received from households in 2002 was £6.4bn, an increase of 60 per cent compared with the 2001 estimate of £4.0bn<sup>4</sup>. This means that the share of business to household Internet sales has increased from 24 per cent in 2001<sup>4</sup>, to 27 per cent in 2002.

In 2002, the value of online orders received from businesses was £16.9bn, an increase of 32 per cent from the 2001 estimate of £12.8bn<sup>4</sup>. The share of

business to business Internet sales has decreased between the two years from 76 per cent in 2001<sup>4</sup> to 73 per cent in 2002.

### Value of Internet orders received by UK non-financial sector businesses, from businesses and households, 2001 and 2002

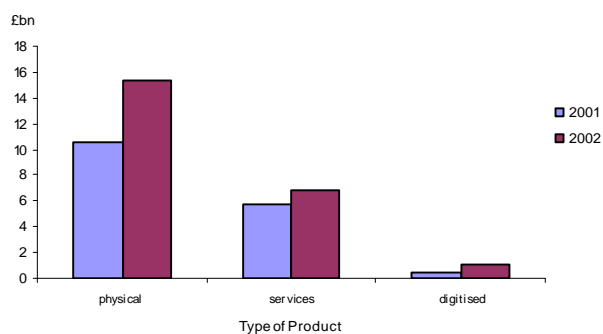


### Value of orders received over the Internet by type of product (Table 2)

In 2002, the value of online orders for physical products increased from £10.6bn in 2001<sup>4</sup> to £15.4bn. Online sales of physical products continued to be the largest share of the total value of online orders received in 2002 at 66 per cent, compared with 63 per cent in 2001<sup>4</sup>.

Online sales of services continued to have the second largest share at 29 per cent in 2002 (£6.8bn), compared with 35 per cent in 2001 (£5.8bn<sup>4</sup>). The value of online orders received for digitised products increased its share in 2002 to 5 per cent (£1.1bn) from 2 per cent (£0.4bn<sup>4</sup>) in 2001.

### Value of Internet orders received by UK non-financial sector businesses, by type of product, 2001 and 2002



<sup>4</sup> The 2001 estimate has been revised due to company misreporting and improved data validation procedures. Future revisions may also similarly apply to 2002 estimates. See Explanatory Notes for further details.

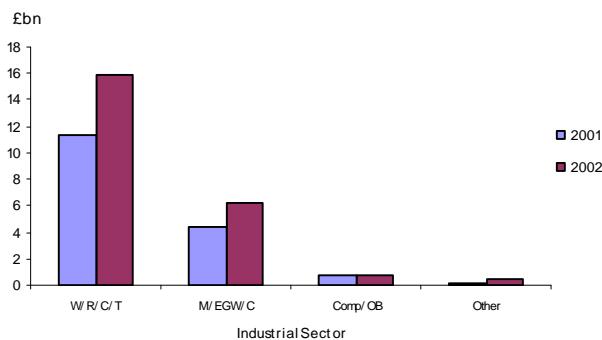
<sup>5</sup> The sample of the smallest businesses (with employment less than ten) is completely renewed each year under the ONS Osmotherly Survey Holiday rule, therefore the estimates for this sizeband can be volatile.

### Value of orders received over the Internet, by broad industrial sector<sup>6</sup> (Table 3)

As in 2001, the Wholesale/ Retail/ Catering/ Travel/ Telecommunications sector accounted for the largest share of the value of orders received over the Internet in 2002, with £15.9bn, that is 68 per cent. This represents 41 per cent growth from the 2001 estimate of £11.3bn<sup>4</sup>.

Also as in 2001, the second largest sector was the Manufacturing/ Electricity, Gas and Water Supply/ Construction sector with £6.2bn or 27 per cent. This represents 41 per cent growth from the 2001 estimate of £4.4bn<sup>4</sup>. The Computing/Other business services sector accounted for £0.7bn in 2002; followed by the Other Services sector with £0.5bn.

### Value of Internet orders received by UK non-financial sector businesses, by industrial sector, 2001 and 2002

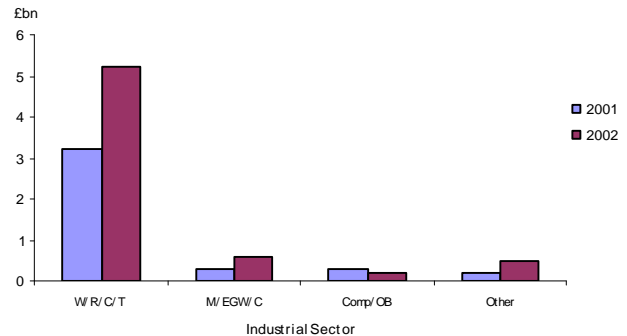


### Value of orders received over the Internet from households and businesses, by broad industrial sector<sup>6</sup> (Table 4)

In 2002, online orders received from households by UK non-financial sector businesses were dominated by the Wholesale/ Retail/ Catering/ Travel/ Telecommunications sector, as in 2001. In

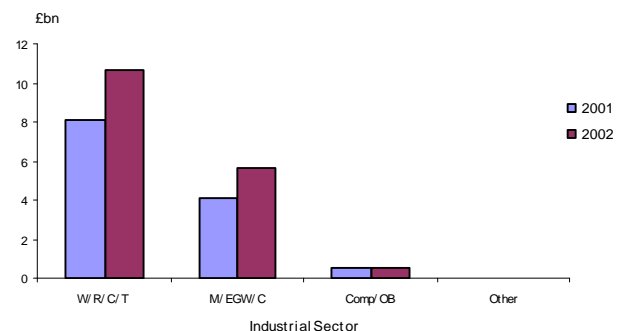
this sector, the value of Internet orders received in 2002 was £5.2bn or 81 per cent of the value of orders received from households. This represents an increase of 63 per cent from the 2001 estimate of £3.2bn<sup>4</sup>.

### Value of Internet orders received by UK non-financial sector businesses from households, by industrial sector, 2001 and 2002



The Wholesale/ Retail/ Catering/ Travel/ Telecommunications sector also had the largest share of the value of Internet orders received from businesses, with £10.7bn or 63 per cent. As in 2001, this was followed by the Manufacturing/Electricity, Gas and Water Supply/Construction sector with £5.6bn or 33 per cent.

### Value of Internet orders received by UK non-financial sector businesses from businesses, by industrial sector, 2001 and 2002



<sup>4</sup> The 2001 estimate has been revised due to company misreporting and improved data validation procedures. Future revisions may also similarly apply to 2002 estimates. See Explanatory Notes for further details.

<sup>6</sup> The broad sectors used in this report are defined as the following 2 digit divisions of the UK SIC(92):  
M/EGW/C - Manufacturing/Electricity, Gas and Water supply/Construction 15-45  
W/R/C/T - Wholesale/Retail/Catering/Travel/Telecommunications 50-64  
Comp/OB - Computing /Other business services 70-74  
Other - Other services 85-93

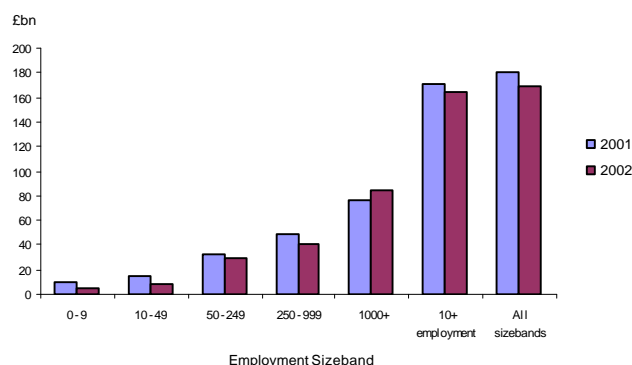
### Value of orders received over Information and Communication Technologies (ICTs) other than the Internet (Table 5)

The value of orders received over ICTs other than the Internet was £169.1bn in 2002. This represents a decrease of 6 per cent from the 2001 estimate of £180.5bn<sup>4</sup>. As in the case of receiving orders over the Internet, the larger the size of businesses the

higher the value of orders received over other ICTs, with firms with 1000 or more in employment accounting for 50 per cent of the value.

ICTs other than the Internet are defined as electronic data interchange (EDI), e-mail, PC-based fax or automated telephone entry. Telephone interaction (person to person) and conventional fax are excluded.

#### Orders received over ICTs other than the Internet by UK non-financial sector businesses, by sizeband, 2001 and 2002

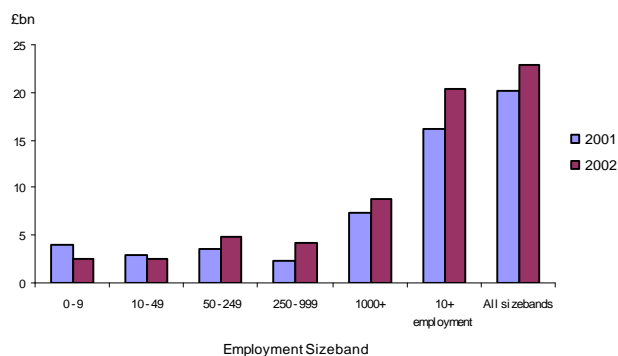


### ORDERS PLACED OVER INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTs)

#### Value of orders placed over the Internet (Table 6)

In 2002 the value of orders placed over the Internet by UK non-financial sector firms was £22.9bn, an increase of 14 per cent from the 2001 estimate of £20.1bn<sup>4</sup>. The value of orders placed online was larger for the larger sized businesses, with firms with 1000 or more in employment accounting for 44 per cent of the total value of online orders placed.

#### Value of orders placed over the Internet by UK non-financial sector businesses, by sizeband, 2001 and 2002

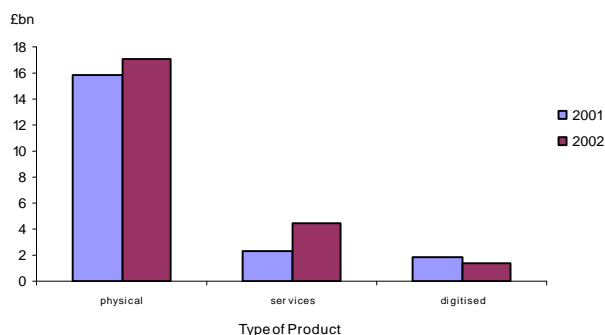


#### Value of orders placed over the Internet by type of product (Table 6)

In 2002, the value of online orders placed for physical products increased from £15.9bn in 2001<sup>4</sup> to £17.1bn. Online orders placed for physical products continued to be the largest share of the total value of online orders placed in 2002 at 75 per cent, although its share of total orders placed had decreased from 79 per cent in 2001<sup>4</sup>.

Online orders for services continued to have the second largest share at 20 per cent in 2002 (£4.5bn), increasing from 11 per cent in 2001 (£2.3bn<sup>4</sup>). The value of online orders placed for digitised products decreased its share in 2002 to 6 per cent (£1.4bn) from 9 per cent (£1.9bn<sup>4</sup>) in 2001.

#### Value of orders placed over the Internet by UK non-financial sector businesses, by type of product, 2001 and 2002



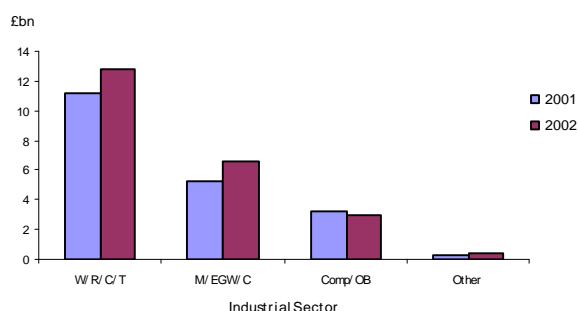
<sup>4</sup> The 2001 estimate has been revised due to company misreporting and improved data validation. See Explanatory Notes for further details.

## Value of orders placed over the Internet, by broad industrial sector<sup>6</sup> (Table 7)

The broad industrial sectors most active in online selling were also the most active in online purchasing activity in 2002, as in 2001. The Wholesale/ Retail/ Catering/ Travel/ Telecommunications sector placed the largest share of the value of Internet orders, with £12.8bn or 56 per cent. This represents an increase of 14 per cent from the 2001 estimate of £11.2bn<sup>4</sup>.

Again as in 2001, the second largest sector in terms of online purchasing was the Manufacturing/Electricity, Gas and Water Supply/Construction sector, with £6.6bn or 29 per cent in 2002. This was followed by the Computing/Other business services sector with £3.0bn or 13 per cent, and the Other services sector with £0.4bn or 2 per cent.

### Value of orders placed over the Internet by UK non-financial sector businesses, by industrial sector, 2001 and 2002



## EXPLANATORY NOTES

1. The 2001 estimates of the value of electronic trading have been revised. The annual e-commerce survey of business is a new survey and is still developing, and has been redesignated as

<sup>4</sup> The 2001 estimate has been revised due to company misreporting and improved data validation procedures. Future revisions may also similarly apply to 2002 estimates. See Explanatory Notes for further details.

<sup>6</sup>The broad sectors used in this report are defined as the following 2 digit divisions of the UK SIC(92):

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Other - Other services 85-93

experimental statistics for this reason. ONS implemented improved and extended automated data validation procedures for the third survey in respect of 2002 which highlighted problems with business survey returns for the 2001 survey.

Firms are continuing to have difficulty in estimating the proportion of their orders made and received online, and have consistently overestimated for each of the three years the survey has been conducted, resulting in downward revisions. This area of measurement has been highlighted as one of difficulty by various EU countries and discussions are expected to progress at an international level during 2004.

In addition, estimation of the population totals assumes an equal weight for all respondents. This treatment may not be wholly appropriate and is to be reviewed. There is therefore an attendant risk that the estimates could be unusually volatile and may be revised in future.

It is therefore possible that revisions will continue to be a feature of the survey for the foreseeable future.

2. The 28 October 2003 release giving estimates of the percentage of businesses e-trading stated that year on year comparisons with previously published 2001 estimates should not be made. This was due to changes made in the definitions used between the 2001 and 2002 surveys. One of the significant changes made was to clarify that telephone ordering (person to person), and via conventional fax should be excluded.

However this release gives revised estimates for the 2001 value of e-trading, and makes comparisons with the 2002 estimates. This is because when validating businesses' 2002 survey returns against their 2001 returns, it was possible to identify overestimated value of e-activity in 2001, but more difficult to identify businesses incorrectly reporting that they traded electronically in 2001.

**Further information**

For further information please contact:

Cecil Prescott

E-mail: [cecil.prescott@ons.gov.uk](mailto:cecil.prescott@ons.gov.uk)

Telephone: 01633 813384

Debra Prestwood (Statistician)

E-mail: [debra.prestwood@ons.gov.uk](mailto:debra.prestwood@ons.gov.uk)

Telephone: 01633 813063

**Table 1: Value of orders received over the Internet by UK businesses in the non-financial sector, from households and businesses, by size of business, 2001 and 2002**

Employment size		0-9	10-49	50-249	250-999	1000+	All sizebands
<i>£bn</i>							
From households	2001r	0.4	0.2	0.4	0.5	2.5	4.0
	2002	1.0	0.4	0.5	0.8	3.9	6.4
From businesses	2001r	0.8	1.0	1.9	2.9	6.2	12.8
	2002	0.8	1.1	2.5	4.3	8.2	16.9
Total	2001r	1.1	1.2	2.4	3.4	8.7	16.8
	2002	1.7	1.5	3.0	5.1	12.0	23.3

**Table 2: Value of orders received over the Internet by UK businesses in the non-financial sector, by type of product, by size of business, 2001 and 2002**

Employment size		0-9	10-49	50-249	250-999	1000+	All sizebands
<i>£bn</i>							
Physical products	2001r	0.6	0.9	1.8	2.6	4.7	10.6
	2002	0.9	1.1	2.3	4.3	6.7	15.4
Services	2001r	0.5	0.3	0.5	0.8	3.7	5.8
	2002	0.7	0.3	0.5	0.8	4.5	6.8
Digitised products	2001r	-	-	-	-	0.3	0.4
	2002	0.1	-	0.2	-	0.8	1.1
Total	2001r	1.1	1.2	2.4	3.4	8.7	16.8
	2002	1.7	1.5	3.0	5.1	12.0	23.3

Note: Discrepancies may occur between totals and the sum of their independently rounded components  
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**Table 3: Value of orders received over the Internet by UK businesses in the non-financial sector, by broad industrial sector, by size of business, 2001 and 2002**

Employment size		0-9	10-49	50-249	250-999	1000+	All sizebands
<i>£bn</i>							
Manufacturing/ EGW/ Construction	2001	0.3	0.2	0.8	1.7	1.4	4.4 <sup>r</sup>
	2002	0.3	0.4	0.8	2.2	2.5	6.2
W'sale/Retail/ Catering/Travel/ Telecommunications	2001	0.6	0.9	1.4	1.5	6.9	11.3 <sup>r</sup>
	2002	1.3	0.9	2.0	2.7	9.0	15.9
Computing/ Other business services	2001	0.2	0.1	0.1	0.2	0.2	0.8 <sup>r</sup>
	2002	0.2	0.2	0.1	0.1	0.1	0.7
Other Services	2001	-	-	-	-	0.2	0.2
	2002	-	-	0.1	0.1	0.3	0.5
Total	2001 <sup>r</sup>	1.1	1.2	2.4	3.4	8.7	16.8
	2002	1.7	1.5	3.0	5.1	12.0	23.3

Note: Discrepancies may occur between totals and the sum of their independently rounded components  
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**Table 4: Value of orders received over the Internet by UK businesses in the non-financial sector, from households and businesses, by broad industrial sector, 2001 and 2002**

		From households	From businesses
<i>£bn</i>			
Manufacturing/ EGW/ Construction	2001r	0.3	4.1
	2002	0.6	5.6
W'sale/Retail/ Catering/Travel/ Telecommunications	2001r	3.2	8.1
	2002	5.2	10.7
Computing/ Other business services	2001r	0.3	0.5
	2002	0.2	0.5
Other Services	2001	0.2	-
	2002	0.5	-
Total	2001r	4.0	12.8
	2002	6.4	16.9

**Table 5: Value of orders received over ICTs other than the Internet by UK businesses in the non-financial sector, by size of business, 2001 and 2002**

Employment size		0-9	10-49	50-249	250-999	1000+	All sizebands
<i>£bn</i>							
Total	2001r	9.6	14.1	32.3	48.3	76.2	180.5
	2002	4.7	8.7	29.8	41.3	84.7	169.1

Note: Discrepancies may occur between totals and the sum of their independently rounded components  
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**Table 6: Value of orders placed over the Internet by UK businesses in the non-financial sector, by type of product, by size of business, 2001 and 2002**

Employment size		0-9	10-49	50-249	250-999	1000+	All sizebands
<i>£bn</i>							
Physical products	2001r	3.0	2.4	3.1	1.9	5.4	15.9
	2002	1.5	2.1	4.2	3.2	6.0	17.1
Services	2001r	0.5	0.3	0.3	0.2	0.9	2.3
	2002	0.8	0.3	0.4	0.7	2.2	4.5
Digitised products	2001r	0.5	0.1	0.1	0.1	1.0	1.9
	2002	0.2	0.2	0.2	0.2	0.6	1.4
Total	2001r	3.9	2.9	3.5	2.3	7.4	20.1
	2002	2.6	2.5	4.8	4.2	8.8	22.9

**Table 7: Value of orders placed over the Internet by UK businesses in the non-financial sector, by broad industrial sector, by size of business, 2001 and 2002**

Employment size		0-9	10-49	50-249	250-999	1000+	All sizebands
<i>£bn</i>							
Manufacturing/ EGW/ Construction	2001	0.7	0.3	0.5	0.8	3.0	5.3r
	2002	0.6	0.3	1.4	1.3	3.1	6.6
W'sale/Retail/ Catering/Travel/ Telecommunications	2001	1.7	1.9	2.5	1.3	3.9	11.2r
	2002	0.8	1.9	2.5	2.2	5.4	12.8
Computing/ Other business services	2001	1.5	0.7	0.5	0.2	0.4	3.2r
	2002	1.0	0.3	0.9	0.6	0.2	3.0
Other Services	2001	0.1	-	-	-	0.1	0.3
	2002	0.1	-	0.1	0.1	-	0.4
Total	2001r	3.9	2.9	3.5	2.3	7.4	20.1
	2002	2.6	2.5	4.8	4.2	8.8	22.9

Note: Discrepancies may occur between totals and the sum of their independently rounded components  
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