

**ICT USAGE BY ENTERPRISES
AND
HOUSEHOLDS
2011**

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Foreword

Technology today has become an intrinsic part of our work environment and our home life. In its quest to record and provide information on developing trends in the economic and social life of Malta, both at the national level and to enable comparison with our international counterparts, the NSO carries out two annual surveys on information and communication technology covering use of ICT by business enterprises and usage by households and individuals.

The results of these two exercises are incorporated in this publication. The carrying out of the survey and the dissemination of results follow in the steps of past work undertaken by the Office in this domain.

Statistical indicators covered in this book focus on computer and Internet usage in enterprises and by individuals. Other sections focus on the take-up of e-Government facilities and on the electronic skills of individuals. This publication also contains results obtained from an ad-hoc module on the impact of ICT on the environment at an enterprise level.

I take this opportunity to thank Ms SueAnn Scott and Mr Matthew Zerafa for compiling this interesting and useful publication.

Michael Pace Ross
Director General

May 2012

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**1. Information and Communication
Technology usage by enterprises
2011**

Computer use

In the first quarter of 2011, 97 per cent of enterprises had access to a computer, an increase of one percentage point when compared to the corresponding period a year earlier. Almost all the medium and large enterprises (those employing 50 or more persons) were making use of computers (Table 1.1). Computer usage among small enterprises has seen a rise of two percentage points between 2010 and 2011 (Table 1.2). Meanwhile, 48 per cent of employees made use of a computer as part of their regular work, at par with the estimate for 2010 (Table 1.3).

Enterprises making use of third-party, free or open-source operating systems amounted to 20 per cent of total enterprises using computers – an increase of eight percentage points when compared to the corresponding period in 2010 (Table 1.5). Furthermore, 30 per cent of enterprises provided their employees with electronic access to the organisation’s human resource services. This facility is most common among large enterprises (those employing 250 or more persons), at 70 per cent of this group (Chart 1.1).

Table 1.1. Computer use by enterprises

	Absolute 2011	% total enterprises		Percentage change
		2010	2011	
Total	1,132	95.7	96.7	1.0
Size class:				
10-49	872	94.6	96.4	1.8
50-249	213	100.0	97.8	-2.2
250+	47	100.0	97.6	-2.4
Main economic activity:				
Manufacturing	229	96.1	95.2	-0.9
Construction	97	87.6	91.9	4.3
Wholesale and retail trade	375	99.0	99.7	0.7
Transportation and storage	74	98.3	100.0	1.7
Accommodation and food service activities	127	87.4	92.7	5.3
Information and communication	49	100.0	100.0	0.0
Professional, scientific and technical activities	99	98.6	100.0	1.4
Administrative and support service activities	70	95.1	93.7	-1.4
Other ^u	12	100.0	82.9	:

^u under-represented

Table 1.2. Computer use by enterprises employing 10-49 persons

	Absolute 2011	% total enterprises		Percentage change
		2010	2011	
10-49	872	94.6	96.4	1.8
Main economic activity:				
Manufacturing	169	94.9	94.8	-0.1
Construction	74	84.8	89.7	4.9
Wholesale and retail trade	331	98.9	99.6	0.7
Transportation and storage	57	97.8	100.0	2.2
Accommodation and food service activities	76	81.9	88.3	6.4
Information and communication	28	100.0	100.0	0.0
Professional, scientific and technical activities	88	98.4	100.0	1.6
Administrative and support service activities	41	92.9	97.4	4.5
Other ^u	8	100.0	76.0	:

^u under-represented

Table 1.3. Employees using the computer at work

	Absolute (2011)		% total employment		Percentage change
	Employees	Computer users	2010	2011	
Total	66,335	31,879	47.9	48.1	0.2
Size class:					
10-49	19,843	9,986	49.4	50.3	0.9
50-249	21,374	9,296	45.6	43.5	-2.1
250+	25,118	12,597	48.6	50.2	1.6
Main economic activity:					
Manufacturing	16,102	7,875	45.4	48.9	3.5
Construction	5,879	1,040	15.9	17.7	1.8
Wholesale and retail trade	10,929	6,619	59.2	60.6	1.4
Transportation and storage	6,071	3,428	53.9 ^u	56.5	:
Accommodation and food service activities	9,722	2,562	30.1	26.4	-3.7
Information and communication	4,069	3,817	88.8	93.8	5.0
Professional, scientific and technical activities	3,767	2,990	67.8 ^u	79.4	:
Administrative and support service activities	6,416	2,218	43.3 ^u	34.6	:
Other ^u	:	:	:	:	:

^u under-represented

Table 1.4. Employees using the computer at work (enterprises employing 10-49 persons)

	Absolute (2011)		% total employment		Percentage change
	Employees	Computer users	2010	2011	
Total	19,843	9,986	49.4	50.3	0.9
Main economic activity:					
Manufacturing	4,014	1,205	29.9	30.0	0.1
Construction	1,855	370	18.8	20.0	1.2
Wholesale and retail trade	7,001	4,311	57.4	61.6	4.2
Transportation and storage	1,197	657	56.1	54.9	-1.2
Accommodation and food service activities	2,008	496	28.9	24.7	-4.2
Information and communication	636	591	83.0	92.8	9.8
Professional, scientific and technical activities	1,924	1,648	82.9	85.6	2.7
Administrative and support service activities	991	601	62.2	60.6	-1.6
Other ^u	:	:	:	:	:

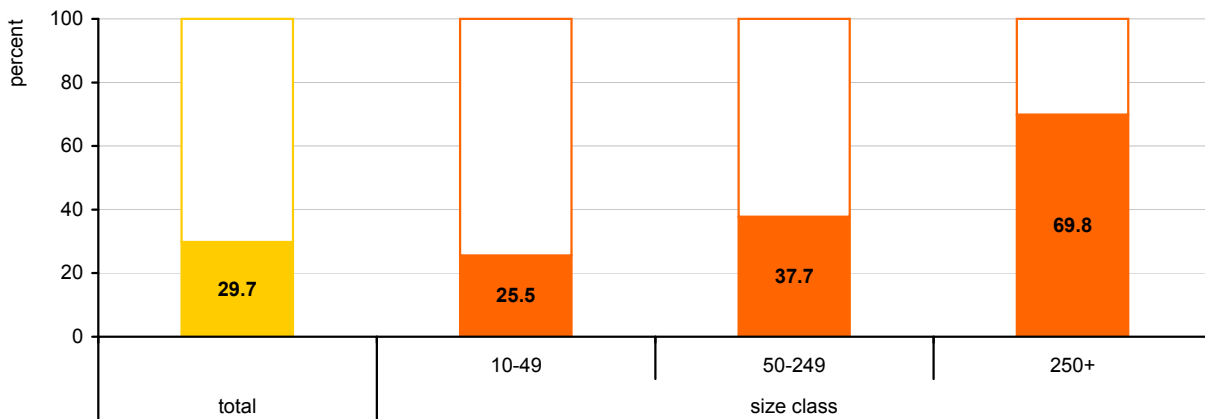
^u under-represented

Table 1.5. Enterprise use of third-party, free or open-source operating systems

	Absolute 2011	% enterprises using computers		Percentage change
		2010	2011	
Total	223	12.1	19.7	7.6
Size class:				
10-49	130	9.5	14.9	5.4
50-249	73	20.6	34.4	13.8
250+	20	28.4	42.7	14.3
Main economic activity:				
Manufacturing	38	8.5	16.8	8.3
Construction	:	2.4 ^u	:	:
Wholesale and retail trade	68	11.3	18.2	6.9
Transportation and storage	14	14.9	19.2	4.3
Accommodation and food service activities	28	6.6 ^u	21.8	:
Information and communication	32	51.9	64.9	13.0
Professional, scientific and technical activities	19	12.2 ^u	19.1	:
Administrative and support service activities	13	15.2 ^u	18.1	:
Other ^u	6	:	51.7	:

^u under-represented

Chart 1.1. Enterprises providing employees with electronic access to human resource services



Internet use

The survey results showed that 95 per cent of enterprises had Internet access during the reference period. There was a marginal increase in enterprises using the Internet compared to 2010 levels (Table 1.6). The use of a dial-up connection has declined considerably, with DSL broadband connection emerging as the most popular type of Internet connection; such a connection was utilised by 85 per cent of all local enterprises (Chart 1.2).

Thirty-six per cent of employees used the Internet at work during January 2011. This proportion is similar to 2010 (Table 1.8). Moreover, Table 1.9 shows that 16 per cent of employees using the Internet at work were provided with a portable device for accessing this technology.

E-Government

The use of e-Government services is very popular among Maltese enterprises. This is borne out by the ICT enterprise survey which shows that 95 per cent of eligible enterprises that use the Internet tapped into e-Government services during 2011. This share is 12 percentage points higher than the 2010 level (Table 1.10). E-Government is most commonly used for obtaining information – 94 per cent of enterprises – and for downloading forms such as tax returns – 87 per cent of enterprises (Table 1.11). Table 1.12 shows a list of possible reasons identified by respondents as limiting the use of e-Government services by enterprises. The most common reasons given were that electronic procedures still require the exchange of paper mail or personal visits, and that e-Government procedures are perceived as too complicated or too time-consuming at times.

Table 1.13 shows that during the reference period, 77 per cent of enterprises using the Internet had a website or home page – an increase of 7 percentage points over the corresponding period a year earlier. The most available facilities on enterprises’ websites were product catalogues or price lists, and privacy policy statements or certifications of website safety. These proportion accounted for 53 per cent and 49 per cent of enterprises with websites or home pages respectively (Table 1.14).

Table 1.6. Internet use by enterprises

	Absolute 2011	% total enterprises		Percentage change
		2010	2011	
Total	1,113	93.8	95.1	1.3
Size class:				
10-49	853	92.7	94.3	1.6
50-249	213	97.8	97.8	0.0
250+	47	100.0	97.6	-2.4
Main economic activity:				
Manufacturing	225	93.7	93.6	-0.1
Construction	95	86.5	90.6	4.1
Wholesale and retail trade	369	97.7	98.1	0.4
Transportation and storage	73	96.5	98.3	1.8
Accommodation and food service activities	122	82.3	89.0	6.7
Information and communication	49	100.0	100.0	0.0
Professional, scientific and technical activities	99	97.3	100.0	2.7
Administrative and support service activities	69	93.6	92.2	-1.4
Other ^u	12	100.0	82.9	:

^u under-represented**Table 1.7. Internet use by enterprises employing 10-49 persons, FTE**

	Absolute 2011	% total enterprises		Percentage change
		2010	2011	
10-49	853	92.7	94.3	-0.2
Main economic activity:				
Manufacturing	165	91.8	92.6	0.8
Construction	72	83.5	87.9	4.4
Wholesale and retail trade	325	97.4	97.8	0.4
Transportation and storage	56	95.7	97.8	2.1
Accommodation and food service activities	71	77.8	82.5	4.7
Information and communication	28	100.0	100.0	0.0
Professional, scientific and technical activities	88	96.9	100.0	3.1
Administrative and support service activities	40	92.9	94.7	1.8
Other ^u	8	100.0	76.0	:

^u under-represented

Chart 1.2. Type of Internet connection: January 2011

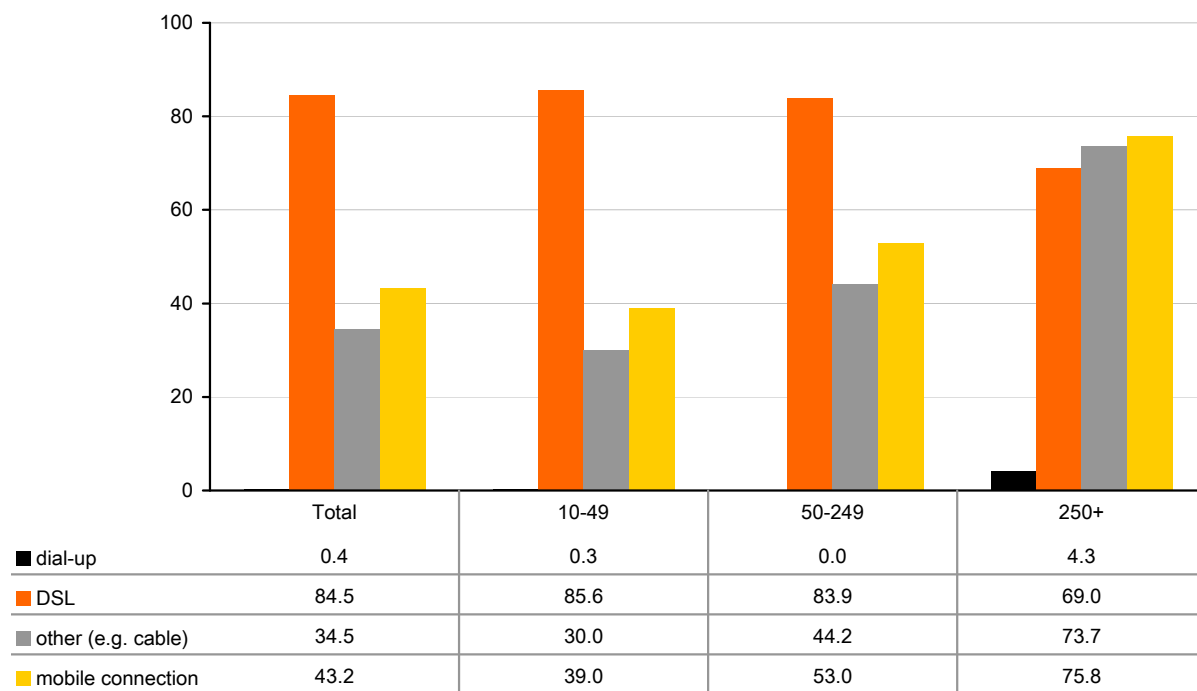


Chart 1.3. Type of Internet connection: January 2010

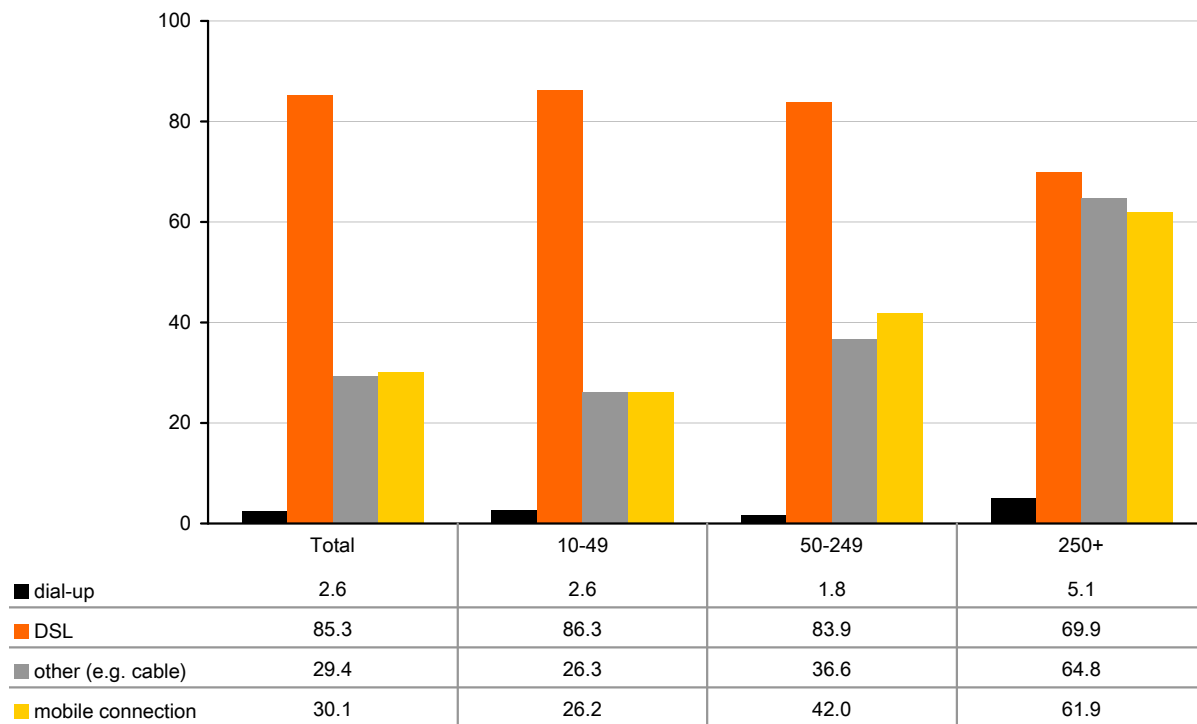


Table 1.8. Employees using the Internet at work

	Internet users	% total employment		Percentage change
	2011	2010	2011	
Total	23,569	34.9	35.5	0.6
Size class:				
10-49	8,121	42.1	40.9	-1.2
50-249	7,187	34.4	33.6	-0.8
250+	8,260	28.5	32.9	4.4
Main economic activity:				
Manufacturing	4,249	23.5	26.4	2.9
Construction	890	11.4	15.1	3.7
Wholesale and retail trade	4,614	42.8	42.2	-0.6
Transportation and storage	2,835	49.7 ^u	46.7	:
Accommodation and food service activities	1,820	21.8	18.7	-3.1
Information and communication	3,756	87.1 ^u	92.3	:
Professional, scientific and technical activities	2,786	60.6 ^u	74.0	:
Administrative and support service activities	1,747	29.5 ^u	27.2	:
Other ^u	872	:	25.8	:

^u under-represented

Table 1.9. Employees provided with a portable device for accessing the Internet

	Employees (2011)		% of Internet users
	Internet users	Mobile Internet users	
Total	23,569	3,700	15.7
Size class:			
10-49	8,121	1,242	15.3
50-249	7,187	965	13.4
250+	8,260	1,494	18.1
Main economic activity:			
Manufacturing	4,249	297	7.0
Construction	890	112	12.6
Wholesale and retail trade	4,614	632	13.7
Transportation and storage	2,835	196	6.9
Accommodation and food service activities	1,820	189	10.4
Information and communication	3,756	1,048	27.9
Professional, scientific and technical activities	2,786	610	21.9
Administrative and support service activities	1,747	440	25.2
Other ^u	872	177	20.3

^u under-represented

Table 1.10. Percentage use of e-Government services by enterprises

	Absolute 2011	% enterprises using Internet		Percentage change
		2010	2011	
Total	1,055	82.4	94.8	12.4
Size class:				
10-49	801	79.8	94.0	14.2
50-249	208	93.0	97.5	4.5
250+	46	92.0	97.5	5.5
Main economic activity:				
Manufacturing	215	78.3	95.9	17.6
Construction	91	83.2	96.0	12.8
Wholesale and retail trade	350	81.4	94.8	13.4
Transportation and storage	67	80.6	91.5	10.9
Accommodation and food service activities	112	83.1	92.1	9.0
Information and communication	47	85.4	95.2	9.8
Professional, scientific and technical activities	95	87.3	95.9	8.6
Administrative and support service activities	66	86.2	95.1	8.9
Other ^u	12	100.0	100.0	:

^u under-represented

Table 1.11. Enterprise e-Government usage by type of service

	Absolute 2011	% using e-Government		Percentage change
		2010	2011	
For obtaining information	995	97.7	94.4	-3.3
For obtaining forms e.g. tax forms	917	93.0	86.9	-6.1
For returning filled-in forms ¹	622	68.5	59.0	-9.5
For treating an administrative procedure completely electronically ²	412	64.4	39.1	-25.3
e-Procurement	414	17.3	39.3	22.0

¹ for example: provision of statistical information to public authorities

² examples of administrative procedures include declaration, registration, authorisation request, etc.

Table 1.12. E-Government – Reasons given by respondents that limit electronic interaction with public authorities: 2011

	Absolute	% enterprises using Internet
Concerns related to data confidentiality and security	230	20.7
Electronic procedures too complicated / too time consuming	315	28.3
Electronic procedures still require exchange of paper mail or personal visits	424	38.1
Not aware of availability of electronic procedures	143	12.8

Table 1.13. Number of enterprises with a website or home page

	Absolute 2011	% enterprises using Internet		Percentage change
		2010	2011	
Total	851	69.9	76.5	6.6
Size class:				
10-49	628	65.9	73.6	7.7
50-249	179	83.3	83.9	0.6
250+	45	94.9	95.4	0.5
Main economic activity:				
Manufacturing	164	68.4	73.0	4.6
Construction	55	48.6	57.6	9.0
Wholesale and retail trade	264	64.5	71.5	7.0
Transportation and storage	63	76.7	86.7	10.0
Accommodation and food service activities	106	81.5	87.1	5.6
Information and communication	46	90.2	94.8	4.6
Professional, scientific and technical activities	80	74.1	81.2	7.1
Administrative and support service activities	62	87.0	89.6	2.6
Other ^u	10	76.7	89.7	13.0

^u under-represented

Table 1.14. Available facilities on enterprises' website or home page

	Absolute 2011	% enterprises with a website or home page		Percentage change
		2010	2011	
A privacy statement or certification related to website safety	414	52.6	48.6	-4.0
Product catalogues or price lists	451	58.5	53.0	-5.5
Possibility for visitors to customise or design the products	70	10.7	8.2	-2.5
Online ordering, reservation or booking e.g. shopping cart	250	31.3	29.3	-2.0
Online order tracking	47	9.6	5.5	-4.1
Personalised content in the website for regular/ repeated visitors	68	11.5	8.0	-3.5
Advertisement of open job positions or online job application	226	28.6	26.6	-2.0

Electronic share of information

Tables 1.15 and 1.16 measure the electronic transmission of information between enterprises. Such systems allow users to send and receive messages (e.g. orders, invoices, payment transactions) through computer networks without the individual message being typed manually. During January 2011, electronic information was shared among 47 per cent of enterprises, a five-percentage-point drop when compared to January 2010.

Fifty-two per cent of Maltese enterprises that use computers said that they automatically share information concerning sales orders within the enterprise departments. In addition, 43 per cent shared purchase orders within the enterprise.

Table 1.15. Electronic transmission of data among enterprises

	Absolute 2011	% enterprises using computers		Percentage change
		2010	2011	
Total	536	51.8	47.3	-4.5
Size class:				
10-49	400	49.1	45.8	-3.3
50-249	111	60.8	52.0	-8.8
250+	25	69.3	54.1	-15.2
Main economic activity:				
Manufacturing	95	46.7	41.6	-5.1
Construction	43	37.4	44.5	7.1
Wholesale and retail trade	189	55.1	50.3	-4.8
Transportation and storage	43	60.7	57.8	-2.9
Accommodation and food service activities	52	55.0	40.8	-14.2
Information and communication	30	57.5	61.5	4.0
Professional, scientific and technical activities	45	51.2	45.0	-6.2
Administrative and support service activities	32	53.4	45.9	-7.5
Other ^u	7	:	60.9	:

^u under-represented

Table 1.16. Type of information transmitted electronically

	Absolute 2011	% enterprises transmitting data electronically		Percentage change
		2010	2011	
Sending payment instructions to financial institutions	429	75.7	80.1	4.4
Sending or receiving product information	412	76.0	77.0	1.0
Sending or receiving transport documents	327	59.3	61.0	1.7
Sending or receiving data to/from public authorities	368	72.6	68.8	-3.8

Table 1.17. Automatic sharing of information within the enterprise by reason for use

	Absolute 2011	% enterprises using computers		Percentage change
		2010	2011	
Sales orders received:	590	50.6	52.1	1.5
Management of inventory levels	424	35.7	37.4	1.7
Accounting	532	44.6	47.0	2.4
Production or services management	363	30.5	32.1	1.6
Distribution management	332	28.7	29.3	0.6
Purchase order sent:	488	43.7	43.1	-0.6
Management of inventory levels	385	33.6	34.0	0.4
Accounting	456	39.7	40.3	0.6

E-commerce

In 2011, 225 enterprises that used the Internet, or 20 per cent of those with 10 or more employees (FTE), received orders through computer networks – an increase of two percentage points when compared to the previous year (Table 1.18). In monetary terms this amounted to over €1 billion in e-commerce sales, accounting for almost 14 per cent of such enterprises' total turnover. When compared to 2010, a drop of seven percentage points was recorded. This was mainly the result of an increase in total turnover in the case of enterprises that did not receive orders over the Internet, especially among large enterprises (250 or more employees, FTE). Moreover, 75 per cent of the value of e-commerce sales was generated through electronic data interchange (EDI), implying that the remaining 25 per cent was the result of web sales (Table 1.20).

Table 1.21 shows that 27 per cent of enterprises using the Internet placed orders through computer networks – an increase of three percentage points when compared to the previous year. These purchases amounted to over €750,000, or 15 per cent of total purchases by Internet-using enterprises. Similar to e-commerce sales, e-commerce purchases saw a drop of nine percentage points when compared to 2010.

Table 1.18. Enterprises making sales through e-commerce

	Absolute 2011	% enterprises using Internet		Percentage change
		2010	2011	
Total	225	18.4	20.2	1.8
Size class:				
10-49	148	16.3	17.3	1.0
50-249	61	26.6	28.7	2.1
250+	16	27.8	34.5	6.7
Main economic activity:				
Industry, including energy	28	12.8	11.9	-0.9
Construction	:	2.4 ^u	:	:
Wholesale and retail trade	69	16.9	18.6	1.7
Hotels and restaurants, transport and communication	92	33.0	37.9	4.9
Real estate, renting and business activities, other service activities	32	18.7	18.5	-0.2

^u under-represented

Table 1.19. Turnover from e-commerce sales

€ 000,000

	E-commerce turnover	% total turnover*		Percentage change
		2010	2011	
Total	1,008	20.9	13.8	-7.1
Size class:				
10-49	68	7.3	2.4	-4.9
50-249	123	3.5	7.4	3.9
250+	817	47.6	29.3	-18.3
Main economic activity:				
Industry, including energy	778 ^u	:	29.4 ^u	:
Construction	6	0.1	1.8	1.7
Wholesale and retail trade	25	4.2	1.1	-3.1
Hotels and restaurants, transport and communication	172	25.9	10.9	-15.0
Real estate, renting and business activities, other service activities	27	9.2 ^u	4.8	:

^u under-represented

* E-commerce as a percentage of total turnover (from enterprises using Internet)

Table 1.20. Percentage of e-commerce sales

	2010 (Row %)		2011 (Row %)	
	Websites	Electronic data interchange*	Websites	Electronic data interchange*
Total	14.8	85.2	25.0	75.0
Size class:				
10-49	31.5	68.5	79.2	20.8
50-249	54.4	45.6	62.7	37.3
250+	10.0	90.0	14.8	85.2
Main economic activity:				
Industry, including energy	:	96.6	:	90.5
Construction	:	:	:	:
Wholesale and retail trade	11.7 ^u	88.3	83.9	16.1
Hotels and restaurants, transport and communication	38.3	61.7	79.6	20.4
Real estate, renting and business activities, other service activities	54.0	46.0	65.7	34.3

^u under-represented

* Electronic transmission allowing automatic information processing

Table 1.21. Enterprises making purchases through e-commerce

	Absolute 2011	% enterprises using Internet		Percentage change
		2010	2011	
Total	300	24.5	27.0	2.5
Size class:				
10-49	209	21.3	24.5	3.2
50-249	73	38.1	34.4	-3.7
250+	18	30.7	38.8	8.1
Main economic activity:				
Industry, including energy	53	16.4	22.7	6.3
Construction	18	13.4	18.8	5.4
Wholesale and retail trade	106	31.0	28.9	-2.1
Hotels and restaurants, transport and communication	75	25.3	30.9	5.6
Real estate, renting and business activities, other service activities	48	26.4	27.7	1.3

Table 1.22. E-commerce purchases

	Absolute 2011	% total purchases*		Percentage change
		2010	2011	
Total	757	24.2	15.0	-9.2
Size class:				
10-49	169	10.0	8.0	-2.0
50-249	124	16.0	11.5	-4.5
250+	464	47.2	25.1	-22.1
Main economic activity:				
Industry, including energy	282 ^u	:	15.1 ^u	:
Construction	9	2.9	4.5	1.6
Wholesale and retail trade	238	15.0	13.2	-1.8
Hotels and restaurants, transport and communication	209	27.5 ^u	23.4	:
Real estate, renting and business activities, other service activities	19	:	6.9	:

^u under-represented

* E-commerce as a percentage of total purchases (from enterprises using Internet)

ICT and environmental impact

Nearly half of computer-using enterprises said that they have a policy which promotes the reduction of paper for printing or copying purposes (Table 1.23). Furthermore, 55 per cent had in place a policy to reduce the energy consumption of ICT equipment, while 50 per cent had a strategy aimed at replacing physical travel with telephone, web or video conferencing (Tables 1.24 and 1.25).

Table 1.26 shows that 64 per cent of such enterprises provided their employees with remote access to emails, electronic documents and applications during the reference period. Large enterprises (250 or more employees, FTE) emerged as the most likely to provide this service, at 96 per cent compared to 58 per cent of small enterprises.

Table 1.23. Enterprises with policies on reduction of paper for printing/copying purposes: 2011

	Absolute	% enterprises using computers
Total	558	49.3
Size class:		
10-49	411	47.2
50-249	120	56.5
250+	27	56.6
Main economic activity:		
Manufacturing	107	46.8
Construction	50	52.0
Wholesale and retail trade	171	45.4
Transportation and storage	41	55.4
Accommodation and food service activities	65	51.5
Information and communication	24	48.6
Professional, scientific and technical activities	55	55.9
Administrative and support service activities	40	57.4
Other ^u	5	39.1

^u under-represented

Table 1.24. Enterprises with policies on reduction of consumption of energy by ICT equipment: 2011

	Absolute	% enterprises using computers
Total	627	55.4
Size class:		
10-49	467	53.6
50-249	131	61.5
250+	29	60.9
Main economic activity:		
Manufacturing	113	49.6
Construction	53	55.1
Wholesale and retail trade	202	53.7
Transportation and storage	51	68.4
Accommodation and food service activities	76	59.7
Information and communication	27	56.0
Professional, scientific and technical activities	60	61.1
Administrative and support service activities	37	52.3
Other ^u	7	62.1

^u under-represented

Table 1.25. Enterprises with policies on use of telephone, web or video conferencing instead of physical travel: 2011

	Absolute	% enterprises using computers
Total	562	49.6
Size class:		
10-49	432	49.6
50-249	106	49.8
250+	24	50.2
Main economic activity:		
Manufacturing	100	43.7
Construction	38	39.0
Wholesale and retail trade	185	49.2
Transportation and storage	40	53.6
Accommodation and food service activities	57	44.8
Information and communication	31	63.6
Professional, scientific and technical activities	59	60.0
Administrative and support service activities	45	63.9
Other ^u	7	60.9

^u under-represented

Table 1.26. Enterprises that provide employees with remote access to emails, electronic documents and applications: 2011

	Absolute	% enterprises using computers
Total	723	63.9
Size class:		
10-49	507	58.2
50-249	171	80.1
250+	45	95.7
Main economic activity:		
Manufacturing	140	61.3
Construction	49	50.3
Wholesale and retail trade	215	57.3
Transportation and storage	50	67.8
Accommodation and food service activities	77	60.8
Information and communication	45	92.2
Professional, scientific and technical activities	85	86.3
Administrative and support service activities	54	77.2
Other ^u	7	60.9

^u under-represented

**2. Information and Communication
Technology usage in households
and by individuals**

2011

Computer and Internet access in households

The results of the ICT usage in Households and by Individuals survey for 2011 show that 76 per cent of households had access to a computer at home – an increase of three percentage points when compared to the previous year. The largest increase in computer access occurred among households consisting of two adults and no children (18 percentage points). Furthermore, households with an income in the €9,001-€14,000 bracket registered a considerable increase in computer availability, equivalent to almost 19 percentage points over 2010.

Similar trends were observed with regard to Internet access. In 2011, 75 per cent of households had access to the Internet, a five-percentage-point increase in comparison with 2010. The most notable increases with regard Internet availability in households were observed in low-income families – families earning €9,000 or less registered a rise of 14 percentage points, and families in the €9,001-€14,000 income bracket, of 20 percentage points.

Broadband Internet is by far the most popular type of Internet connection, reflecting overall national trends (Table 2.3). Chart 2.1 shows that DSL is the most popular type of broadband Internet connection in Malta, at 67 per cent of total households with broadband Internet.

However, a number of households did not have Internet access at home. Nearly half of such households said that they did not possess the necessary navigation skills, while 44 per cent said they did not need home Internet access.

Table 2.1. Households with access to a computer at home

	% household population		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total	73.1	76.4	95,734	109,744	14,010	14.6
Household composition:						
One adult without children	41.5	43.9	7,529	11,853	4,324	57.4
One adult with children	:	83.2	:	1,829	:	:
Two adults without children	47.8	65.8	16,081	23,454	7,373	45.8
Two adults with children	96.4	92.5	18,649	23,840	5,191	27.8
Three or more adults without children	87.7	90.6	40,770	36,858	-3,912	-9.6
Three or more adults with children	96.5	96.0	12,208	11,910	-298	-2.4
Household income: (€)						
Less than 9,000	40.4	49.5	13,005	23,285	10,280	79.0
9,001-14,000	64.1	82.7	17,728	29,432	11,704	66.0
14,001-21,000	87.4	91.3	32,394	23,002	-9,392	-29.0
21,001-30,000	94.6	94.7	22,218	19,191	-3,027	-13.6
31,001-37,000	98.0	92.0	6,087	7,223	1,136	18.7
37,001 or more	100.0	99.0	4,302	7,611	3,309	76.9

: Data not reliable due to small sample representation

Table 2.2. Households with access to the Internet at home

	% household population		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total	70.4	75.3	92,218	108,179	15,961	17.3
Household composition:						
One adult without children	39.3	45.0	7,123	12,143	5,020	70.5
One adult with children	:	76.2	:	1,674	:	:
Two adults without children	43.7	62.7	14,673	22,342	7,669	52.3
Two adults with children	96.0	90.8	18,560	23,403	4,843	26.1
Three or more adults without children	85.1	90.2	39,541	36,707	-2,834	-7.2
Three or more adults with children	94.8	96.0	11,993	11,910	-83	-0.7
Household income: (€)						
Less than 9,000	34.5	48.5	11,087	22,846	11,759	106.1
9,001-14,000	61.1	80.6	16,903	28,713	11,810	69.9
14,001-21,000	85.9	90.5	31,838	22,801	-9,037	-28.4
21,001-30,000	93.7	93.7	22,001	18,985	-3,016	-13.7
31,001-37,000	98.0	92.0	6,087	7,223	1,136	18.7
37,001 or more	100.0	99.0	4,302	7,611	3,309	76.9

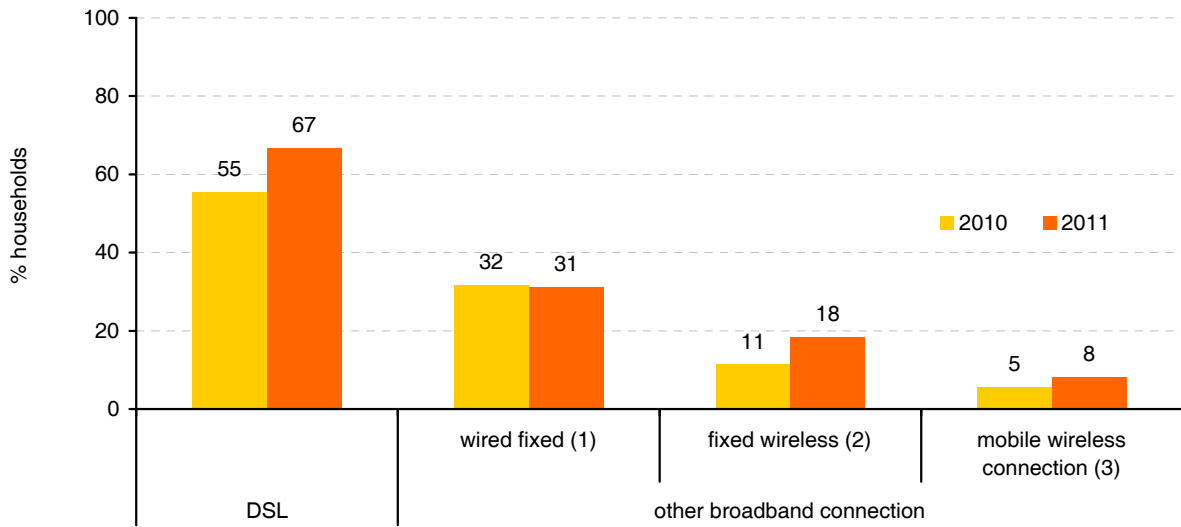
: Data not reliable due to small sample representation

Table 2.3. Type of Internet connection in the household

	% total		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total households with Internet access	100.0	100.0	92,218	108,179	15,961	17.3
Narrowband	1.6	0.5	1,508 ^u	:	:	:
Broadband*	98.4	99.5	90,710	107,645	16,935	18.7

*Includes DSL, wired fixed, fixed wireless and mobile wireless connection (Methodological notes)

Chart 2.1. Type of broadband connection



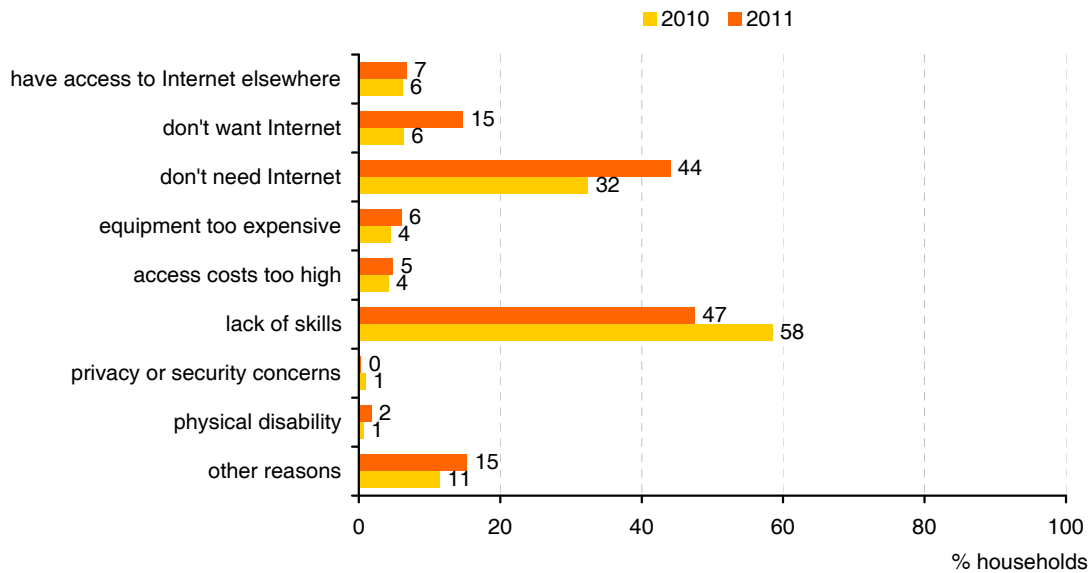
(1) wired fixed includes cable, fibre, Ethernet, PLS, etc...

(2) fixed wireless includes satellite, WiFi, WiMax

(3) mobile wireless connection includes 3G/UMTS, USB key, laptop card etc...

Note: Households may have more than one connection.

Chart 2.2. Reasons for not having access to the Internet at home



Computer use by individuals

Eighty-one per cent of the total population aged between 16-74 had access to a computer at home in 2011 (Table 2.4). Computer usage emerged as more popular with the younger age groups. In fact, 95 per cent of individuals in the 16-24 age bracket had access to a computer at home, against 43 per cent of individuals aged between 65-74.

Table 2.5 shows that 69 per cent of the target population used a computer in the first quarter of 2011, an increase of nine per cent when compared to the corresponding period in 2010. The number of individuals who never used a computer decreased by 15 per cent. On a gender basis, 71 per cent of males and 67 per cent of females used a computer in the reference period. Increases in computer usage were registered in the majority of age groups. However, computer usage among the 16-24 age group fell from 99 per cent in 2010 to 94 per cent in 2011 (Table 2.6). This category encompassed the highest share of computer users.

Among respondents who used a computer in the three-month reference period, 83 per cent did so every day or almost every day, and a further 15 per cent at least once a week. Individuals mostly used a computer at home or at their place of work, amounting to 96 per cent and 43 per cent of computer users respectively (Chart 2.3).

Table 2.4. Profile of individuals with computer access at home: 2011

	% population			Absolute		
	Total	Males	Females	Total	Males	Females
Total	81.0	81.3	80.7	257,386	129,650	127,736
Age Group:						
16-24	94.8	91.1	98.6	49,401	24,461	24,940
25-34	89.9	88.1	91.8	55,583	28,084	27,499
35-44	89.9	86.3	93.5	46,501	22,540	23,961
45-54	86.9	86.0	87.7	49,904	24,829	25,075
55-64	69.2	76.8	61.7	40,211	22,029	18,182
65-74	43.2	45.0	41.6	15,786	7,707	8,079
District:						
Southern Harbour	80.2	81.5	78.8	49,482	25,644	23,838
Northern Harbour	82.4	82.1	82.7	76,416	38,567	37,849
South Eastern	80.2	81.3	79.0	38,298	19,021	19,277
Western	81.6	86.0	77.2	36,932	19,563	17,369
Northern	83.6	80.3	86.9	39,442	18,694	20,748
Gozo and Comino	72.8	70.1	75.4	16,816	8,161	8,655
Educational Level:						
No schooling/Primary	43.7	46.4	41.6	21,663	9,987	11,676
Secondary	80.1	78.5	81.7	112,718	54,590	58,128
Post-secondary	94.9	92.9	97.2	75,076	40,469	34,607
Tertiary	99.1	99.0	99.3	47,929	24,604	23,325
Employment Situation:						
Employed/Self-employed	90.1	88.1	93.6	156,737	97,357	59,380
Unemployed	66.5	68.1	63.8	10,591	6,707	3,884
Student	99.0	100.0	98.2	17,677	7,639	10,038
Other inactive	65.7	56.9	69.3	72,381	17,947	54,434

Table 2.5. Latest instance of computer use

	% population		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total	100.0	100.0	313,053	317,821	4,768	1.5
Three months prior to survey*	63.9	68.9	200,081	218,883	18,802	9.4
3-12 months before survey	0.7 ^u	:	2,134 ^u	:	:	:
More than one year before survey	2.0	1.9 ^u	6,242	6,085 ^u	:	:
Never used a computer	33.4	28.1	104,596	89,272	-15,324	-14.7

*This is equal to quarter one of the reference year

Table 2.6. Profile of computer users*

	% population		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total	63.9	68.9	200,081	218,883	18,802	9.4
Sex:						
Males	68.2	70.5	107,119	112,464	5,345	5.0
Females	59.6	67.2	92,962	106,419	13,457	14.5
Age Group:						
16-24	99.2	94.2	52,795	49,095	-3,700	-7.0
25-34	87.1	89.5	51,486	55,354	3,868	7.5
35-44	78.6	77.8	39,277	40,255	978	2.5
45-54	54.1	62.1	32,872	35,698	2,826	8.6
55-64	33.7	50.5	18,823	29,361	10,538	56.0
65-74	14.1 ^u	25.0	4,828 ^u	9,120	:	:
District:						
Southern Harbour	62.2	66.8	36,954	41,232	4,278	11.6
Northern Harbour	61.5	74.0	57,171	68,632	11,461	20.0
South Eastern	57.7	65.5	26,646	31,290	4,644	17.4
Western	69.8	68.3	30,214	30,909	695	2.3
Northern	76.2	70.0	36,829	33,039	-3,790	-10.3
Gozo and Comino	53.7	59.6	12,267	13,781	1,514	12.3
Educational Level:						
No schooling/Primary	10.5	18.4	5,962	9,120	3,158	53.0
Secondary	58.6	64.4	79,710	90,645	10,935	13.7
Post-secondary	94.1	90.4	73,816	71,524	-2,292	-3.1
Tertiary	97.4	98.4	40,593	47,594	7,001	17.2
Employment Situation:						
Employed/Self-employed	82.7	83.3	140,044	144,794	4,750	3.4
Unemployed	59.5	52.8	6,526	8,421	1,895	29.0
Student	100.0	96.4	22,967	17,218	-5,749	-25.0
Other inactive	27.8	44.0	30,544	48,450	17,906	58.6

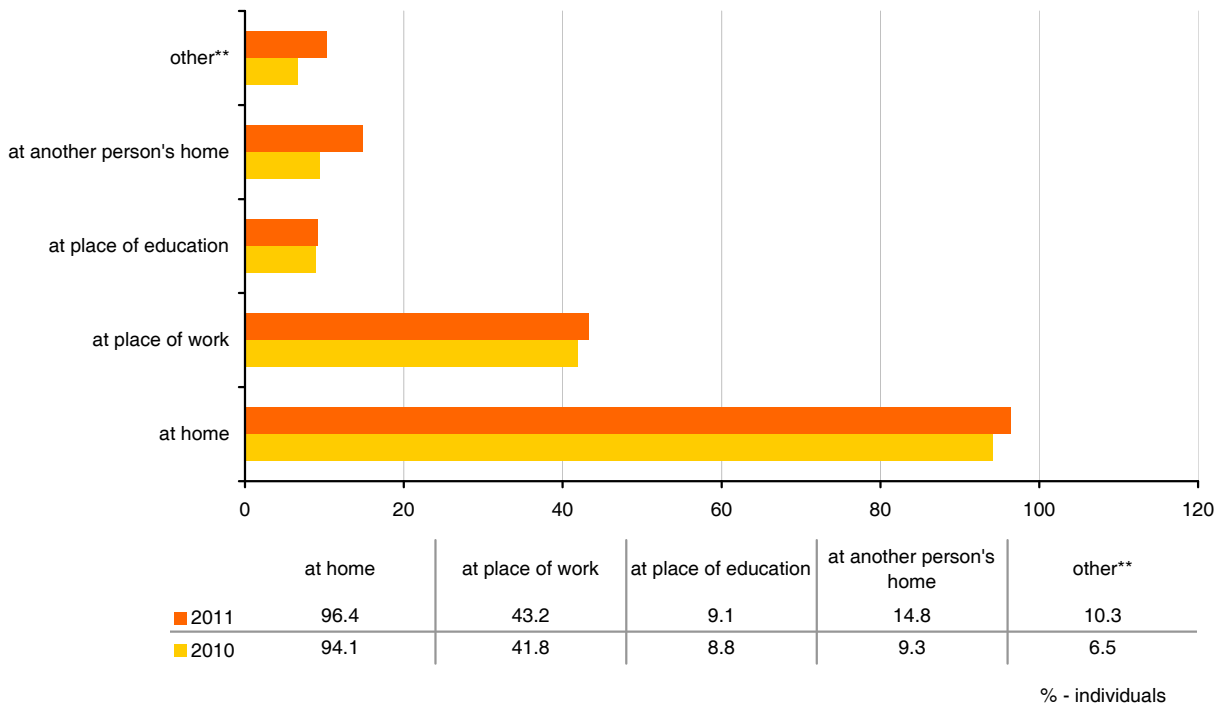
* includes only persons who used a computer during January-March of the reference year

Table 2.7. Computer users by frequency* of use

	Percentage		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total	63.9	68.9	200,081	218,883	18,802	9.4
Every day or almost every day	79.2	82.5	158,522	180,581	22,059	13.9
At least once a week (but not every day)	16.5	14.6	32,988	32,001	-987	-3.0
At least once a month (but not every week)	3.5	2.3 ^u	6,983	5,047 ^u	:	:
Less than once a month	0.8 ^u	:	1,588 ^u	:	:	:

* includes only persons who used a computer during January-March of the reference year

Chart 2.3. Places where individuals used computers during the first quarter



* Multiple response was permitted in this question

** Includes other places such as public libraries, hotels, airport, Internet cafe, etc.

Internet use by individuals

The survey results indicate that 80 per cent of the target population had access to the Internet at home during the reference period. Home Internet access was most common among 16-24-year-old persons: 89 per cent of males and 98 per cent of females in this age group had home Internet access. Nearly all students and 89 per cent of employed persons had Internet access at home. This rate fell to 66 per cent among unemployed persons. Furthermore, almost all individuals with a tertiary level of education had Internet access at home.

Tables 2.9 and 2.10 show that 68 per cent of individuals used the Internet between January and March 2011, an increase of six percentage points over the corresponding period in 2010. Table 2.10 also shows that Internet popularity lessens with age and increases with the level of education. With regard to geographical distribution, the largest proportion of frequent Internet users can be found in the Northern Harbour district (73 per cent) followed by the Western district (67 per cent).

An analysis of the frequency of Internet use indicated that 81 per cent of individuals said that they used the Internet every day or almost everyday, while 16 per cent did so at least once a week (Table 2.11). Chart 2.4 shows that 96 per cent of Internet users accessed this medium at home, and 39 per cent at their place of work. In the reference period, the most common reasons for using the Internet were finding information about goods and services and reading or downloading online newspapers/magazines. Both activities were engaged in by 78 per cent of Internet users (Table 2.12).

E-Government

Fifty-four per cent of Internet users made use of e-Government services in 2011, a drop of six percentage points over the previous year; in spite of such a drop, there was a small increase in the number of e-Government users between 2010 and 2011 (Table 2.14). E-Government users are quite evenly distributed across different age groups, led by persons aged 25-34, and followed by the 35-44 and 65-74 age groups. An analysis of reasons for use of e-Government revealed 42 per cent of Internet users who sought information from the websites of public authorities and 39 per cent who wanted to download official forms (Table 2.13).

Table 2.8. Profile of individuals with access to the Internet at home: 2011

	% population			Absolute		
	Total	Males	Females	Total	Males	Females
Total	79.8	79.6	80.0	253,477	126,911	126,566
Age Group:						
16-24	93.6	89.4	98.1	48,811	24,002	24,809
25-34	88.0	86.4	89.6	54,402	27,548	26,854
35-44	88.7	84.5	92.9	45,876	22,074	23,802
45-54	85.8	85.6	86.0	49,268	24,701	24,567
55-64	68.0	73.6	62.5	39,520	21,129	18,391
65-74	42.7	43.6	42.0	15,600	7,457	8,143
District:						
Southern Harbour	78.4	79.1	77.7	48,394	24,891	23,503
Northern Harbour	82.5	82.1	83.0	76,573	38,567	38,006
South Eastern	76.0	74.4	77.5	36,288	17,390	18,898
Western	80.9	86.0	75.6	36,577	19,563	17,014
Northern	83.2	79.5	86.9	39,262	18,514	20,748
Gozo and Comino	70.9	68.6	73.2	16,383	7,986	8,397
Educational Level:						
No schooling/Primary	44.0	45.2	43.1	21,854	9,737	12,117
Secondary	77.9	75.9	79.9	109,608	52,800	56,808
Post-secondary	93.3	90.7	96.4	73,833	39,517	34,316
Tertiary	99.7	100.0	99.3	48,182	24,857	23,325
Employment Situation:						
Employed/Self-employed	88.8	87.1	92.0	154,519	96,184	58,335
Unemployed	65.9	67.2	63.8	10,498	6,614	3,884
Student	95.7	94.0	96.9	17,087	7,181	9,906
Other inactive	64.8	53.6	69.3	71,373	16,932	54,441

Table 2.9. Latest instance of Internet use

	% population		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total	100.0	100.0	313,053	317,821	4,768	1.5
Three months prior to survey*	62.1	68.0	194,218	216,194	21,976	11.3
3 - 12 months before survey	1.0 ^u	:	3,247 ^u	:	:	:
More than one year before survey	1.0 ^u	:	3,163 ^u	:	:	:
Never used the Internet	35.9	29.7	112,425	94,432	-17,993	-16.0

*This is equal to January-March of the reference year

Table 2.10. Profile of Internet users*

	% population		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total	62.0	68.0	194,218	216,194	21,976	11.3
Sex:						
Males	66.2	69.6	103,938	110,994	7,056	6.8
Females	57.9	66.5	90,280	105,200	14,920	16.5
Age Group:						
16-24	98.8	94.5	52,560	49,265	-3,295	-6.3
25-34	85.2	88.8	50,341	54,935	4,594	9.1
35-44	76.3	77.2	38,158	39,954	1,796	4.7
45-54	51.2	60.1	31,116	34,519	3,403	10.9
55-64	31.7	49.6	17,725	28,824	11,099	62.6
65-74	12.6 ^u	23.8	4,318 ^u	8,696	:	:
District:						
Southern Harbour	57.9	66.3	34,405	40,919	6,514	18.9
Northern Harbour	60.9	73.1	56,638	67,788	11,150	19.7
South Eastern	57.2	65.0	26,416	31,055	4,639	17.6
Western	67.1	67.4	29,021	30,492	1,471	5.1
Northern	75.2	69.2	36,320	32,626	-3,694	-10.2
Gozo and Comino	50.0	57.6	11,418	13,314	1,896	16.6
Educational Level:						
No schooling/Primary	8.3 ^u	18.0	4,709 ^u	8,947	:	:
Secondary	56.8	62.9	77,207	88,511	11,304	14.6
Post-secondary	91.7	89.9	71,953	71,143	-810	-1.1
Tertiary	96.8	98.4	40,349	47,594	7,245	18.0
Employment Situation:						
Employed/Self-employed	80.6	82.8	136,360	143,926	7,566	5.5
Unemployed	54.5	51.3	5,980	8,177	2,197	36.7
Student	99.0	96.4	22,732	17,218	-5,514	-24.3
Other inactive	26.5	42.6	29,146	46,873	17,727	60.8

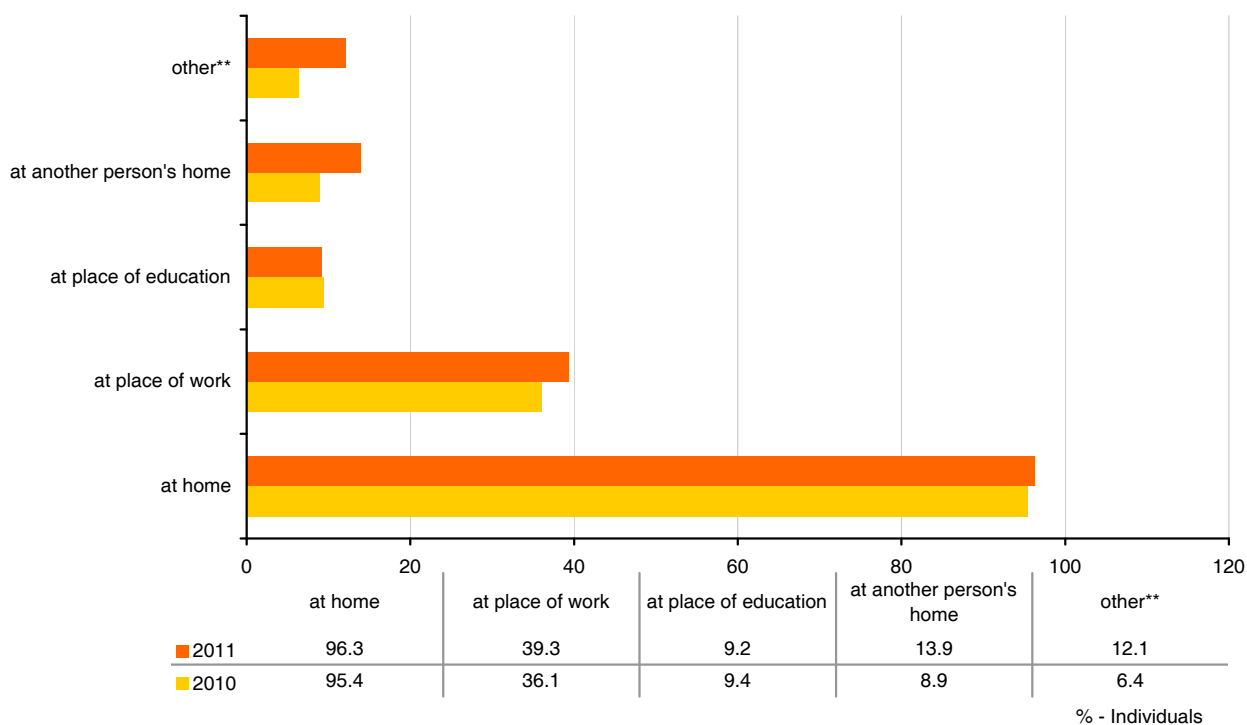
* Includes only persons who used the internet during January-March of the reference year

Table 2.11. Frequency of Internet use*

	% population		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total	62.0	68.0	194,218	216,194	21,976	11.3
Every day or almost every day	79.5	80.8	154,379	174,629	20,250	11.6
At least once a week (but not every day)	16.9	15.8	32,897	34,283	1,386	4.0
At least once a month (but not every week)	3.0 ^u	3.1	5,796 ^u	6,616	:	:
Less than once a month	0.6 ^u	:	1,146 ^u	:	:	:

* Includes only persons who used the internet during January-March of the reference year

Chart 2.4. Places where individuals accessed the Internet in the first quarter*



* Multiple response was permitted in this question

** Includes other places such as public libraries, hotels, airport, Internet cafe, etc.

Table 2.12. Activities for which the Internet was used: 2011*

	% internet users			Absolute		
	Total	Males	Females	Total	Males	Females
Communication and access to information:	97.6	97.1	98.2	211,072	107,784	103,288
Participating in social networks	65.5	61.6	69.6	141,594	68,399	73,195
Reading or downloading online newspapers/magazines	78.0	80.5	75.3	168,547	89,358	79,189
Seeking health-related information	57.5	50.7	64.7	124,285	56,225	68,060
Looking for info about education, training or course offers	57.5	53.7	61.5	124,281	59,551	64,730
Finding information about goods and services	78.1	78.2	77.9	168,825	86,840	81,985
Downloading software (excl. games)	31.4	38.2	24.2	67,846	42,416	25,430
Civil and political participation:	25.2	27.4	22.8	54,399	30,430	23,969
Reading and posting on civic or political issues via websites	19.9	21.4	18.3	42,998	23,724	19,274
Taking part in online consultation or voting to define civic or political issues	15.9	18.4	13.3	34,456	20,415	14,041
Learning:	56.5	56.5	56.4	122,071	62,733	59,338
Doing an online course	8.4	9.1	7.7 ^u	18,189	10,140	8,049 ^u
Consulting the Internet for learning purposes	55.0	54.9	55.1	118,910	60,984	57,926
Professional life:	37.2	34.8	39.7	80,377	38,610	41,767
Looking for a job/sending a job application	29.3	27.3	31.5	63,417	30,256	33,161
Participating in professional networks	16.5	16.0	17.1	35,758	17,730	18,028
Other online services:	82.8	83.8	81.8	179,083	93,006	86,077
Using services related to travel and accommodation	56.2	56.7	55.7	121,576	62,959	58,617
Selling goods or services e.g. via auction	30.6	31.1	30.0	66,068	34,532	31,536
Telephoning over the Internet	34.7	34.0	35.5	75,086	37,747	37,339
Internet banking	61.8	66.2	57.2	133,628	73,439	60,189

* Includes only persons who used the internet during January-March of the reference year

Table 2.13. Use of e-Government services: 2011*

	% internet users			Absolute		
	Total	Males	Females	Total	Males	Females
Obtaining information from public authorities' website	41.5	45.6	37.2	89,747	50,612	39,135
Downloading official forms	39.0	42.1	35.6	84,212	46,771	37,441
Sending filled-in forms	23.6	26.8	20.3	51,010	29,706	21,304

* Includes only persons who used the internet during January-March of the reference year

Note: Multiple response was permitted for these questions

Table 2.14. Profile of e-Government users*

	% Internet users		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total	60.0	54.3	116,608	117,380	772	0.7
Sex:						
Males	57.7	57.3	59,921	63,615	3,694	6.2
Females	62.8	51.1	56,687	53,765	-2,922	-5.2
Age Group:						
16-24	55.4	42.5	29,120	20,959	-8,161	-28.0
25-34	61.2	61.9	30,821	34,031	3,210	10.4
35-44	64.2	61.6	24,487	24,599	112	0.5
45-54	64.5	51.2	20,080	17,686	-2,394	-11.9
55-64	56.5	52.2	10,007	15,048	5,041	50.4
65-74	48.5 ^u	58.2	2,094 ^u	5,058	:	:
District:						
Southern Harbour	62.3	54.5	21,448	22,287	839	3.9
Northern Harbour	57.0	58.6	32,294	39,693	7,399	22.9
South Eastern	60.4	45.9	15,967	14,270	-1,697	-10.6
Western	63.4	56.4	18,410	17,184	-1,226	-6.7
Northern	69.5	53.8	25,224	17,545	-7,679	-30.4
Gozo and Comino	28.6 ^u	48.1	3,265 ^u	6,402	:	:
Educational Level:						
No schooling/Primary	32.8 ^u	36.5 ^u	1,546 ^u	3,267 ^u	:	:
Secondary	44.4	41.9	34,303	37,112	2,809	8.2
Post-Secondary	67.4	56.7	48,531	40,346	-8,185	-16.9
Tertiary	79.9	77.0	32,228	36,655	4,427	13.7
Employment Situation:						
Employed/Self-employed	63.1	60.1	85,998	86,528	530	0.6
Unemployed	32.3 ^u	38.4 ^u	1,934 ^u	3,141 ^u	:	:
Student	54.2	44.8	12,327	7,718	-4,609	-37.4
Other inactive	56.1	42.7	16,349	19,993	3,644	22.3

* Includes only persons who used the Internet during January-March of the reference year

E-commerce

The proportion of Internet users engaging in e-commerce went up by 5 percentage points in 2011, to 66 per cent (Table 2.15). Of these, 53 per cent carried out transactions over the Internet to purchase items of clothing. The second largest group of commodities comprised books, magazines and newspapers – 32 per cent of individuals (Table 2.16). Table 2.18 shows that 84 per cent of Internet buyers purchased from retailers in other EU Member States, while 10 per cent opted for Maltese vendors.

Table 2.15. Profile of e-commerce users*

	% Internet users		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total	60.5	65.6	117,597	141,720	24,123	20.5
Sex:						
Males	63.0	70.0	65,476	77,680	12,204	18.6
Females	57.7	60.9	52,121	64,040	11,919	22.9
Age Group:						
16-24	67.8	77.9	35,640	38,364	2,724	7.6
25-34	69.0	78.4	34,722	43,080	8,358	24.1
35-44	58.8	67.0	22,445	26,760	4,315	19.2
45-54	51.9	51.2	16,158	17,665	1,507	9.3
55-64	40.1	39.5	7,115 ^u	11,386	4,271	60.0
65-74	35.1 ^u	51.3	1,517 ^u	4,465	:	:
District:						
Southern Harbour	63.7	63.3	21,912	25,902	3,990	18.2
Northern Harbour	56.1	63.6	31,792	43,105	11,313	35.6
South Eastern	57.1	70.2	15,096	21,814	6,718	44.5
Western	53.3	71.0	15,459	21,653	6,194	40.1
Northern	69.5	61.5	25,232	20,053	-5,179	-20.5
Gozo and Comino	71.0	69.0	8,106 ^u	9,193	1,087	13.4
Educational Level:						
No schooling/Primary	43.3 ^u	:	2,039 ^u	:	:	:
Secondary	46.9	54.9	36,242	48,568	12,326	34.0
Post-secondary	66.3	74.9	47,707	53,295	5,588	11.7
Tertiary	78.3	81.1	31,609	38,593	6,984	22.1
Employment Situation:						
Employed/Self-employed	65.8	71.8	89,700	103,364	13,664	15.2
Unemployed	47.2 ^u	59.2	2,820 ^u	4,844	:	:
Student	64.2	76.1	14,598	13,099	-1,499	-10.3
Inactive	36.0	43.5	10,479	20,413	9,934	94.8

* Includes only persons who used the internet during January-March of the reference year

Table 2.16. Type of goods or services acquired over the Internet*

	% internet users		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Food or groceries	2.4 ^u	:	2,765 ^u	:	:	:
Household goods	13.7	19.4	16,122	27,553	11,431	70.9
Medicine	2.6 ^u	3.4 ^u	3,026 ^u	4,822 ^u	:	:
Films, music	22.5	22.1	26,501	31,365	4,864	18.4
Books, magazines, newspapers	36.9	31.7	43,393	44,911	1,518	3.5
E-learning material	5.0	9.4	5,928	13,267	7,339	123.8
Clothes, sports goods	50.1	53.2	58,863	75,451	16,588	28.2
Video games software and upgrades	16.0	18.8	18,818	26,685	7,867	41.8
Other computer software and upgrades	11.9	10.4	14,048	14,802	754	5.4
Computer hardware	11.2	12.6	13,174	17,826	4,652	35.3
Electronic equipment	12.7	27.9	14,970	39,513	24,543	163.9
Telecommunication services	26.2	15.1	30,843	21,394	-9,449	-30.6
Financial services	2.4 ^u	:	2,879 ^u	:	:	:
Holiday accommodation	29.4	29.3	34,575	41,496	6,921	20.0
Other transport arrangements	27.1	29.4	31,847	41,686	9,839	30.9
Tickets for events	20.1	20.9	23,609	29,590	5,981	25.3
Other	25.7	19.6	30,261	27,815	-2,446	-8.1

* Includes only persons who used the Internet during January-March of the reference year and who ordered over the Internet in the last year

Table 2.17. Type of goods downloaded over the Internet*

	% internet users		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Films, music	10.2	9.7	11,964	13,706	1,742	14.6
E-books, magazines, newspapers	11.4	8.4	13,438	11,896	-1,542	-11.5
Computer software	9.8	9.5	11,521	13,505	1,984	17.2

* Includes only persons who used the Internet during January-March of the reference year and who ordered over the Internet in the last year

Note: Multiple response was permitted for these questions

Table 2.18. Origin of goods or services purchased over the Internet

	% e-commerce users		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Malta	9.8	10.2	11,475	14,512	3,037	26.5
Other EU countries	91.6	84.2	107,672	119,367	11,695	10.9
Rest of the world	45.7	45.2	53,726	64,098	10,372	19.3
Country of origin is unknown	1.6 ^u	:	1,922 ^u	:	:	:

*Includes only persons who used the internet during January-March of the reference year

E-skills

The results of the survey as regards computer training suggest that 29 per cent of respondents received some form of training in the three years preceding the carrying out of the survey. This contrasts with 34 per cent who said that they never had formal training in this field (Table 2.19). Full-time students were the most likely recipients of formal computer training, with an estimated 54 per cent (Table 2.20). For the most part, individuals who did not receive any formal training responded that they did not feel the need for such education as they deemed their computer skills to be sufficient (42 per cent). A further 33 per cent said they were involved in self-learning activities as well as hands-on practice (Table 2.21).

Individuals who used computers and the Internet were asked about the activities they had already carried out. In the case of computer activities, the most frequent tasks were the use of the 'copy and paste' tools to duplicate or move information within a document, copying or moving a file or folder, and transferring files between a computer and other devices (Table 2.22). On the other hand, the use of search engines was the most common Internet-related activity (96 per cent). Sending emails with attachments was next (89 per cent). At 64 per cent, posting messages to chat rooms emerged as the third-place activity (Table 2.23).

Ways in which computer or Internet skills were acquired included self-study in the sense of learning by doing (66 per cent), and informal assistance from colleagues, friends or relatives (55 per cent). Forty per cent of computer users said they acquired their skills through formal education (Table 2.24).

Table 2.19. Participation in formal computer training lasting at least 3 hours: 2011*

	% computer users			Absolute		
	Total	Males	Females	Total	Males	Females
Total	100.0	100.0	100.0	218,883	112,464	106,419
Within the last three years	29.3	27.1	31.6	64,078	30,497	33,581
More than three years ago	36.3	36.0	36.6	79,424	40,474	38,950
Never taken one	34.4	36.9	31.8	75,381	41,493	33,888

*Includes only persons who have used a computer during January-March of the reference year

Table 2.20. Computer training received in the three years preceding the survey*

	% internet users		Absolute		Absolute change	Percentage change
	2010	2011	2010	2011		
Total	33.4	29.3	64,856	64,078	-778	-1.2
Sex:						
Males	28.8	27.1	29,958	30,497	539	1.8
Females	38.7	31.6	34,898	33,581	-1,317	-3.8
Age Group:						
16-24	48.6	38.6	25,569	18,944	-6,625	-25.9
25-34	31.3	22.5	15,765	12,446	-3,319	-21.1
35-44	34.2	31.5	13,052	12,678	-374	-2.9
45-54	24.5	23.8	7,626	8,497	871	11.4
55-64	13.2 ^u	30.4	2,332 ^u	8,933	:	:
65-74	11.9 ^u	28.3 ^u	512 ^u	2,580 ^u	:	:
District:						
Southern Harbour	34.3	25.1	11,801	10,354	-1,447	-12.3
Northern Harbour	29.8	28.4	16,862	19,463	2,601	15.4
South Eastern	31.2	36.8	8,254	11,524	3,270	39.6
Western	35.7	29.6	10,347	9,135	-1,212	-11.7
Northern	36.5	27.1	13,274	8,940	-4,334	-32.7
Gozo and Comino	37.8	33.8 ^u	4,318	4,662 ^u	:	:
Educational Level:						
No schooling/Primary	20.7 ^u	39.3 ^u	972 ^u	3,587 ^u	:	:
Secondary	21.7	19.6	16,755	17,804	1,049	6.3
Post-secondary	42.9	36.4	30,888	26,062	-4,826	-15.6
Tertiary	40.3	34.9	16,241	16,625	384	2.4
Employment Situation:						
Employed/Self-employed	31.4	28.0	42,786	40,476	-2,310	-5.4
Unemployed	28.7 ^u	37.5 ^u	1,717 ^u	3,156 ^u	:	:
Student	62.5	53.6	14,211	9,236	-4,975	-35.0
Other inactive	21.1	23.1	6,142	11,210	5,068	82.5

* Percentage of persons who have used a computer during January-March of the reference year

Table 2.21. Reasons for not attending a computer course in the three years preceding the survey: 2011*

	Absolute	% computer users
No need to take one because my computer skills are sufficient	64,195	41.5
No need to take one because I rarely use computers	16,823	10.9
Engagement in self-study or assistance from others	51,348	33.2
Other:		
Lack of time	22,664	14.6
Course costs	:	:
No courses available on subject of interest	3,404 ^u	2.2 ^u
None of the above	9,749	6.3

* Includes only persons who used a computer during January-March 2011

Table 2.22. Computer-related activities carried out: 2011*

	Absolute	% computer users
Copying or moving a file or folder	182,840	83.5
Using 'copy and paste' tools to duplicate or move information within a document	184,980	84.5
Using basic arithmetic formulae in a spreadsheet	138,252	63.2
Compressing (or zipping) files	111,889	51.1
Connecting and installing new devices, e.g. Modem	103,486	47.3
Writing a computer program using a specialised programming language	25,331	11.6
Transferring files between computer and other devices	151,353	69.1
Creating electronic presentations with presentation software (e.g. slides)	94,681	43.3
Installing a new or replacing an old operating system	49,638	22.7

* Includes only persons who used a computer during January-March 2011

Table 2.23. Internet-related activities carried out: 2011*

	Absolute	% Internet users
Using a search engine to find information	207,017	95.8
Sending emails with attached files	191,398	88.5
Posting messages to chat rooms, newsgroups or an online discussion forum	138,602	64.1
Using the Internet to make telephone calls	93,112	43.1
Using peer-to-peer file sharing for exchanging movies, music, etc.	53,450	24.7
Creating a web page	31,745	14.7
Uploading text, games, images, films or music to websites	82,096	38.0
Modifying the security settings of Internet browsers	79,748	36.9

* Includes only persons who used the Internet during January-March 2011

Table 2.24. Where or how computer or Internet skills were obtained: 2011*

	Absolute	% computer and/or Internet users
Formal education institution (school, college, university)	87,869	40.1
Training courses in adult education centre (but not on initiative of employer)	45,340	20.7
Vocational training courses (on demand of the employer)	25,884	11.8
Self-study using books, cd-roms, online courses, wikis, etc.	38,721	17.7
Self-study in the sense of learning by doing	144,609	66.0
Informal assistance from colleagues, relatives, friends	120,869	55.1
Some other way	5,151 ^u	2.4 ^u

* Includes only persons who have carried out one or more computer or Internet related activities

1. ICT ENTERPRISE SURVEY: METHODOLOGICAL NOTES

ICT Enterprise Survey 2011

1.0 SCOPE AND RELEVANCE OF THE ICT SURVEY

The Information and Communication Technology survey on enterprises (ICT-ENT) is an enterprise survey carried out in accordance with Eurostat Regulation (EC) No. 808/2004. The main subjects covered by this survey are:

- ICT systems and their usage in enterprises;
- Use of the Internet and other electronic networks by enterprises;
- E-commerce and e-business processes;
- ICT security.

This survey is mandatory across the European Union (EU), thereby ensuring a harmonised approach at a European level which paves the way for effective benchmarking and data comparison among Member States.

At a national level, this study was carried out under the Malta Statistics Authority Act XXIV of 2000.

2.0 SAMPLE SIZE AND RESPONSE

2.1 Population coverage

A census of companies employing a minimum of 10 employees (Full Time Equivalent - FTE) was undertaken, and the Business Register was used as the original sampling frame. Throughout this survey, an Enterprise is defined as an organisational unit which benefits from a certain degree of autonomy from its owner/s, particularly in the allocation of resources.

Enterprises are subdivided into strata depending on their size class (FTE) and their economic activity (Table 1). The concept of Full Time Equivalence (FTE) assumes that the hours put in by two part-time employees are equivalent to those of one full-timer.

For calibration purposes, enterprises were divided into three size classes, namely small (10-49 employees), medium (50-249 employees) and large enterprises (250 persons employed or more).

Economic activities correspond to the NACE Rev. 2 classification. The sectors covered in this publication include:

- Section C: Manufacturing;
- Section F: Construction;
- Section G: Wholesale and retail trade;
- Section H: Transportation and storage;
- Section I: Accommodation and food service activities;
- Section J: Information and communication;
- Section M, Division 69-74: Professional, scientific and technical activities;
- Section N: Administrative and support activities;
- The 'Other' sector includes enterprises from:
 - Electricity, gas and steam, water supply, sewerage and waste management (Sections D, E)
 - Real estate activities (Section L)
 - Repair of computers (Section S, Group 95.1)

Table M1. Distribution of enterprises for ICT ENT 2011

Economic Activity	Enterprise size class			Total
	10-49	50-249	250+	
Manufacturing	178	50	12	240
Construction	82	19	4	105
Wholesale and retail trade	333	43	1	377
Transportation and storage	57	12	5	74
Accommodation and food service activities	86	42	9	137
Information and communication	28	16	5	49
Professional, scientific and technical activities	88	9	2	99
Administrative and support service activities	42	26	7	75
Other	10	1	3	14
Total	904	218	48	1,170

Economic activities in tables related to e-commerce (Tables 1.18 – 1.22), also corresponding to the NACE Rev. 2 classification, include:

- Industry, including energy
 - Section C: Manufacturing
 - Section D: Electricity, gas, steam and air condition supply
- Construction
 - Section F: Construction
- Wholesale and retail trade
 - Section G: Wholesale and retail trade; Repair of motor vehicles and motorcycles
- Hotels and restaurants, transport and communication
 - Section H: Transportation and storage
 - Section I: Accommodation and food service activities
 - Section J: Information and communication
- Real estate, renting and business activities, other service activities
 - Section L: Real estate activities
 - Section M: Professional, scientific and technical activities
 - Section N: Administrative and support activities
 - Section S: Repair of computers (Group 95.1)

2.2 Data collection

The data collection process was carried out between the first and second quarter of 2011. In many questions, Eurostat specifies January as the reference month. Questionnaires were initially sent to enterprises by post and following a three-week period, interviewers were recruited to follow up with enterprises which had not responded to the questionnaire. Approximately 30 part-time interviewers were employed to conduct face-to-face interviews with organisations, with each one approaching an average of 30 enterprises. The content of the survey was explained to interviewers via a briefing presentation. Furthermore, a centralised system was set up within the Unit to monitor the progress of every interviewer.

Throughout the data collection period, the response for individual strata was monitored to ensure adequate representation at all levels. Strata made up of less than 20 enterprises were targeted for full response as their

small size made them particularly vulnerable. This was also the case for those enterprises employing more than 250 employees (FTE).

For the majority of tables the reference period was January of the reference year, with the exception of tables related to e-government (Tables 1.10-1.12) and e-commerce (Tables 1.18-1.22). In these cases the reference year was January to December of the previous year.

2.3 Response

The response rate achieved in this survey was adequate to produce an array of reliable statistical information. The global response rate stood at 71 per cent, counting both questionnaires received by post and face-to-face interviews. Table 2 shows the percentage response rate obtained in the ICT Enterprises survey for each stratum.

Table M2. Percentage response rate

Economic Activity	Enterprise size class			
	10-49	50-249	250+	Total
Manufacturing	78	92	100	82
Construction	71	100	100	77
Wholesale and retail trade	82	95	100	84
Transportation and storage	81	100	100	85
Accommodation and food service activities	83	95	100	88
Information and communication	79	94	100	86
Professional, scientific and technical activities	74	100	100	77
Administrative and support service activities	90	81	86	87
Other	80	100	100	86
Total	80	94	98	83

2.4 Quality control

Measures undertaken to ensure the high quality of results included:

- Regular data audits;
- Automated data validation embedded in the data entry program;
- Data were re-checked manually during analysis for errors or outliers (also making use of box plots);
- Data checks and validation by means of software provided by Eurostat;
- Ongoing cooperation with Eurostat to ensure that harmonised and reliable data were produced.

In the event of item non-response, the enterprises were contacted once again, and asked to supply the missing information. In the event that this proved unsuccessful, auxiliary information was used – either from other enterprise surveys or from past ICT Enterprises questionnaires. In the absence of auxiliary information imputation techniques, using appropriate mathematical algorithms, were utilised.

Extreme outliers were verified telephonically with respondents – and if these could not be reached, the data were erased and imputed together with the item non-response using appropriate mathematical methods.

2.5 Weighting

Data were weighted to adjust for unit non-response. This was carried out using a post-stratification method according to NACE Rev. 2 and employment groups (FTE), with the gross population as the numerator and net sample as the denominator. It is important to note that this method assumes that unit non-response is random within strata.

2.6 Errors

This survey aimed at 100 per cent coverage of the population (i.e. a full census), yet in practice an overall response rate of 83 per cent was achieved. Added to this, questionnaires were at times incomplete, thus resulting in item non-response. Thus as a result of the weighting and imputation methods which had to be adopted, results suffer to some extent from unknown errors which are very difficult to quantify.

Furthermore, other non-sampling errors may occur for reasons such as respondent error, non-response, the quality of the sampling frame and data entry errors. While every effort was made to minimise these errors, these still occur, and it remains impossible to quantify their effect.

3.0 CONCEPTS AND DEFINITIONS

EDI, EDI-type	Electronic Data Interchange (EDI) refers to the structured transmission of data/documents between organisations/enterprises by electronic means. It also refers specifically to a family of standards (EDI-type) and EDI-type messages which can be automatically processed.
Digital Subscriber Line (DSL)	A family of technologies that provides digital data transmission over the wires of a local telephone network. DSL services are delivered simultaneously with regular telephone on the same telephone line as it uses a higher frequency band that is separated by filtering.
Open Source Software	An open-source license is a copyright license that makes the source code available under terms which allow for modification and redistribution without owing anything to the original author.
Supply Chain Management	Exchanging information with suppliers and/or customers in order to coordinate the availability and delivery of products or services to the final customer. This includes information on demand forecasts, inventories, production, distribution or product development which may be exchanged via websites or other means of electronic data transfer excluding manually typed emails.
Wireless Access	The use of wireless technologies such as radio-frequency, infrared, microwave, or other types of electromagnetic or acoustic waves, for the last internal link between users' devices and a Local Area Network within the enterprise's premises. The most common forms are Wi-fi and Bluetooth technologies.

2. ICT HOUSEHOLD SURVEY: METHODOLOGICAL NOTES

1.0 SCOPE AND RELEVANCE OF THE ICT SURVEY

The Information and Communication Technology usage in households and by individuals survey (ICT-HH) is an individual survey carried out in accordance with Eurostat Regulation (EC) No.808/2004. Locally all work carried out by the NSO is also covered by the Malta Statistics Authority Act XXIV of 2000.

The main topics included in the ICT survey are:

- Access to and use of ICT systems by individuals and/or in households;
- Use of the internet for different purposes by individuals and/or in households;
- ICT security;
- ICT competence;
- Barriers to the use of ICT and the internet.

ICT-HH is mandatory in all EU Member States, thus ensuring comparability across borders.

2.0 SAMPLE SIZE AND RESPONSE

2.1 Population coverage

The target population for this survey included all households in which at least one member was between 16 and 74 years of age. A sample of 2,000 individuals in this spectrum was selected using systematic random sampling from a population database held and maintained by the NSO. This database is based on information gathered in the 2005 Census of Population and Housing. Individuals who had been selected to participate in the same survey in the previous three years were purposely filtered out.

2.1.1 Households

The sampling frame for this survey was subdivided by district and household size. Table 1 shows the frame population for the ICT HH survey adopted in 2011.

Table M3. Household distribution for ICT HH 2011

District	Household size					Total
	1	2	3	4	5+	
1	6,337	7,180	5,704	6,177	3,073	28,471
2	9,680	13,371	9,716	7,701	3,869	44,337
3	2,998	4,508	4,892	4,678	3,305	20,381
4	2,001	4,296	4,878	4,872	2,429	18,475
5	3,776	4,872	4,981	5,544	1,950	21,123
6	2,201	2,634	1,910	2,780	1,364	10,890
Total	26,992	36,861	32,081	31,753	15,990	143,677

2.1.2 Individuals

For calibration purposes, data were subdivided by sex, age groups and districts (NUTS 4 classification). Within this context, the following age brackets were considered:

- 16 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74

Districts were divided according to NUTS 4 classification as follows:

1. Southern Harbour;
2. Northern Harbour;
3. South Eastern;
4. Western;
5. Northern;
6. Gozo and Comino.

Table M4. Individuals distribution for ICT HH 2011

Age group	District						Total
	1	2	3	4	5	6	
16-24	9,474	13,622	8,533	8,103	8,092	4,305	52,129
25-34	13,685	16,909	10,005	8,823	8,243	4,173	61,838
35-44	8,841	13,101	8,760	7,502	9,351	4,179	51,735
45-54	10,169	16,693	8,115	8,667	9,245	4,556	57,445
55-64	11,508	19,112	7,950	7,879	8,415	3,282	58,146
65-74	8,057	13,353	4,408	4,263	3,832	2,616	36,528
Total	61,735	92,789	47,771	45,237	47,177	23,112	317,821

2.2 Data collection

Face-to-face interviews were carried out during the second quarter of 2011. Prior to this, the selected individuals were contacted by post thereby requesting their participation in this survey and explaining why this was so important. A team of approximately 40 part-time interviewers were entrusted with the data collection task. This meant that on average each interviewer was assigned 50 questionnaires. In cases where face-to-face interviews were not possible, telephone interviews were permitted.

Respondents were contacted by phone to arrange time and place for the interview at their best convenience. A maximum of three house visits were carried out before a household was considered as 'no contact'. A briefing session was held in order to provide adequate training to interviewers in tackling respondents.

2.3 Response rate

A total of 1,430 questionnaires were received, accounting for a response rate of 72 per cent – counting both face-to-face and telephone interviews.

2.4 Quality control

Various measures were undertaken to ensure high quality results. These included regular data audits and checks for data entry errors and outliers. Furthermore, ongoing cooperation with Eurostat ensured the production of harmonised and reliable data.

In the case of item non-response, the first preference was to contact the individual and ask for the missing information. In cases where this could not be carried out, auxiliary information was used – based on individuals with similar profiles. In the absence of auxiliary information imputation techniques, the appropriate mathematical algorithms were utilised.

2.5 Grossing-up procedure

In this case separate weights for households and individuals were computed. The household post stratification weight was based on district and household size. In the case of individuals, weights were computed based on post stratification by gender, district (NUTS 4) and age group.

2.6 Errors

In dealing with a sample, an element of sampling error is inevitable. In 2011, an overall response rate of 72 per cent was achieved (1,430 questionnaires). Added to this, returned questionnaires were at times incomplete, thus resulting in item non-response. Ultimately as a result of the weighting and imputation methods which had to be adopted, results suffer to some extent from unknown errors which are very difficult to quantify.

On the other hand, other non-sampling errors may occur for reasons such as respondent error, non-response, the quality of the sampling frame and data entry errors. While every effort was made to minimise these errors, these still occur and it remains impossible to quantify their impact