

**NATIONAL STATISTICAL
SERVICE OF GREECE
Population and Labour Market
Statistics Division
Unit of Special Household Surveys**

**EUROPEAN UNION- SURVEY ON THE USAGE OF INFORMATION AND
COMMUNICATION TECHNOLOGIES (ICT)**

**Analysis of key results of the
2004 survey in Greece**



Athens, July 2005

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GENERAL OUTLINE

The survey on the use of information and communication technologies is part of the European Statistical Program to which all member states participate. Basic aim of the survey is the study, both at national and European level, of the degree of usage of information and communication technologies from the households.

For comparability reasons the survey has been conducted with questionnaire designed centrally from Eurostat and after it's adjustment to national particularities.

Aim of the survey

The survey aims in the study of the households':

- access to selected IC technologies
- use of computers and internet
- purpose and nature of activities on the internet
- internet commerce details

in relation to households' demographic characteristics, educational level and activity of household members.

Coverage

The survey covers all households of the country, independently of their size or any socio-economic characteristics they may have.

Excluded from the survey are:

- collective households such as hotels, hospitals, military camps, nursing homes, etc. As collective households were also considered households with more than 5 lodgers.
- Households having as members foreigners in diplomatic missions.

Response Rates –Some Figures

The survey was carried out, from the National Statistical Service of Greece, in April – May 2004, according to the timetable of the contract. The achieved questionnaires are as following:

The **initial sample** was 4970 households from which :

- 4180 households have been **fully interviewed**,
- 427 households have not been interviewed as having members aged <16 and/or >74 (only demographic characteristics have been recorded),
- 156 households have not been interviewed due to denial for cooperation
- 207 households have not been interviewed due to temporary absence.

The unit response rate was 92,01%.

Contact with households

Before the conduction of the survey, all the households received an advanced letter, almost a month before, informing them for the scope of the survey as well as of the time period of the survey conduction.

BASIC CONCEPTS

▪ **Household**

As household is considered a person living alone in a dwelling or a group of persons, relating or not, residing in the same dwelling.

▪ **Members of the household**

In order to be in agreement with the requests of Eurostat, as far as the reference period is concerned, we considered as household members and registered them, all persons residing in the household during the first quarter of 2004 and for most of this time period.

More specifically, members residing in the dwelling during the reference period (first three months of the year 2004), and were absent during the conduction of the survey, because they had moved permanently in another dwelling, or they were doing their national service, etc. were registered as members. When they were the pre-sampled member they were replaced by another member of the household aged 16-74 (or for convenience with the person on the phone, if age condition was fulfilled).

Members residing in the dwelling during the survey conduction, but not residing during the reference period (returnees, newborns, etc.) weren't registered.

▪ **Education**

Level of education completed during the conduction of the survey. Classification was made according to ISCED-97.

More specifically:

ISCED 0+1 : Pre-primary +primary education (nepiagogeion +dimotiko)

ISCED 2+3+4: Secondary + post secondary education (gymnasio, Lykeio, IEK)

ISCED 5+6: Tertiary education (Technical Educational Institutes, Universities, Master, PhD)

Separate code existed for persons having never attended any level of education.

▪ **Activity status**

Activity status was self-defined. The following categories have been used and have been classified accordingly in the tabulation scheme.

1= Student

2=Employee

3=Self-employed

4=Family worker (unpaid)

5= In compulsory military service

6= Housewife

7=Unemployed

8=Retired

9=Man of independent means

10=Unable to work

11=Child not having yet attended school

▪ **Home based business**

For the recording of this information for all household members, the following concepts have been used:

Household member running a home based business

For persons working in their main job or business mainly at home. This concept applies to many self-employed people, for example in artistic or professional activities, who work wholly or partly at home, often in a part of their living accommodation set aside for the purpose. However, if the place of work comprises a separate unit (for example, a doctor's surgery or tax consultant's practice) which is adjacent to the person's home but contains a separate entrance, then work performed there should not be considered to be done "at home".

Also, for employees having working arrangements, where it is mutually understood by the employee and the employer that a certain part of the work is to be done at home.

Lastly, for persons working as salesmen preparing at home for appointments with clients.

"Working at home" does not cover cases where employees carry out tasks at home (because of personal interest or pressure of time), which under their working arrangements might equally have been performed at their place of work.

Household member teleworking

For members carrying out all or part of their work at least half a day per week away from office space provided by the employer, usually from home, using information and communication technologies.

No home based business and no teleworking

For cases not included in the pre-mentioned cases.

Work in the countryside

For peasants, cattlemen, fishermen, etc. In the tabulation scheme provided by Eurostat this category has been included in "no home based business and no teleworking".

REFERENCE PERIODS

Reference periods used in the survey are:

- 31st of March 2004 (age, educational level completed)
- day of conduction of the survey (activity status, home based business)
 - first 3 months of the year 2004 -January, February, March- (questions B2,B3,C2,C3,C4,C5,C6,C7)
- last 12 months (April 2003-March 2004) for questions B4,C8,D2,D3,D4.

TRAINING OF THE INTERVIEWERS

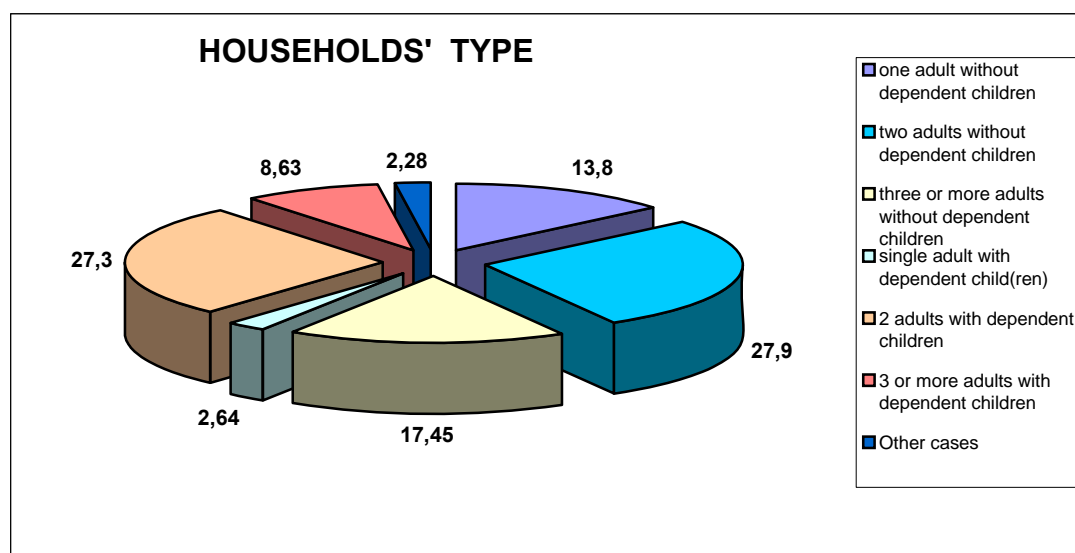
In the 2004 survey 190 interviewers have been used. All interviewers were personnel of the NSSG, experienced with other household surveys.

Training lasted for one day and it was theoretical on the basic concepts of the survey, on the correct completion of the questionnaires and on the use of the computer.

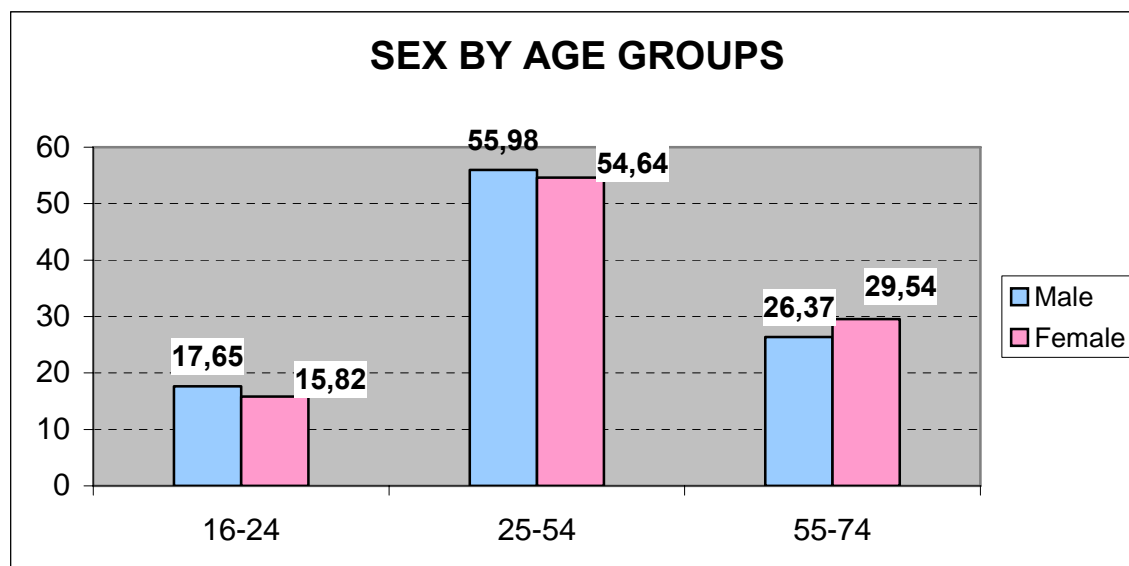
MAIN RESULTS

SOCIO - DEMOGRAPHIC FIGURES

As we can see from our results, the percentages of households consisted of two adults with dependent children and of two adults without dependent children are almost the same, 27,3% and 27,9%, respectively. Then follow households with three or more adults without dependent children (17,45%) and households with one adult without dependent children (13,8%).

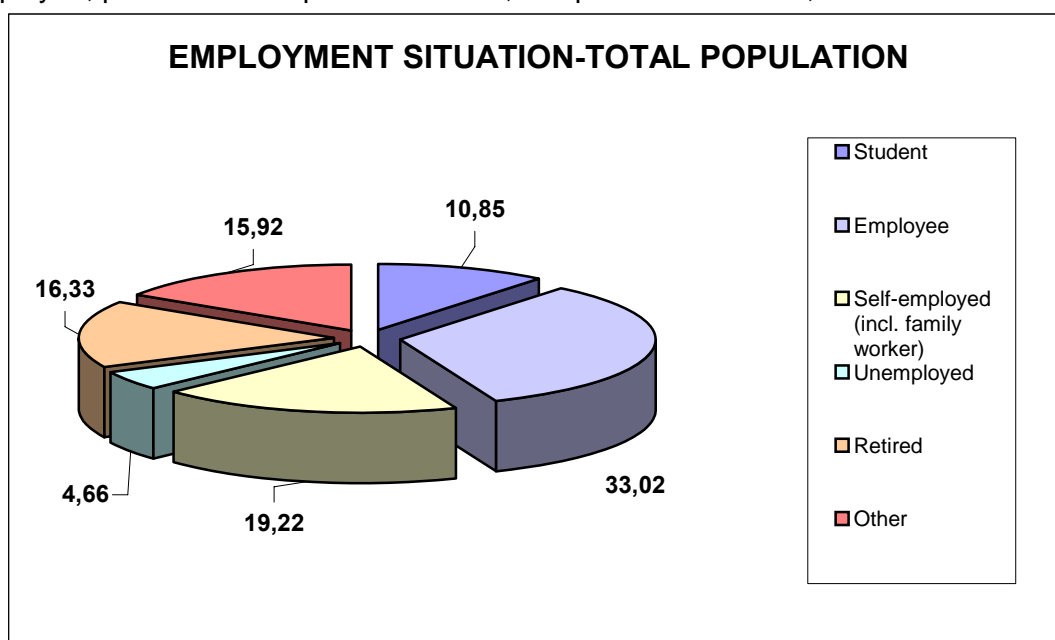


As far as the composition of total population is concerned, it seems that it is equally allocated by sex, as females' percentage is 50,39% and males' 49,61%.

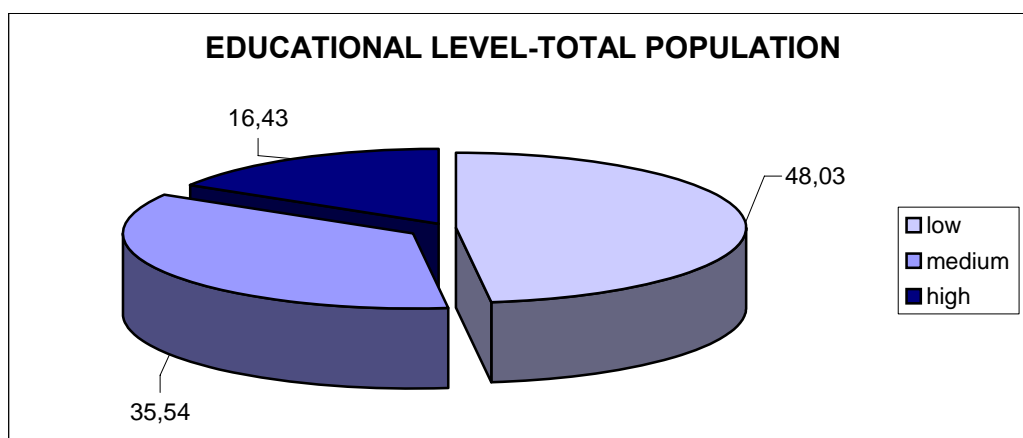


The employment situation of the population is also of interest, in order to have a good view of the reference population. As presented in the following pie-graph, working people (employees, self-employed, family workers, etc.) represent the 52,24% of total population, while students only the 10,85%.

In other activity status have been registered housewives, persons in national service, unemployed, persons of independent means, incapacitated for work, etc.



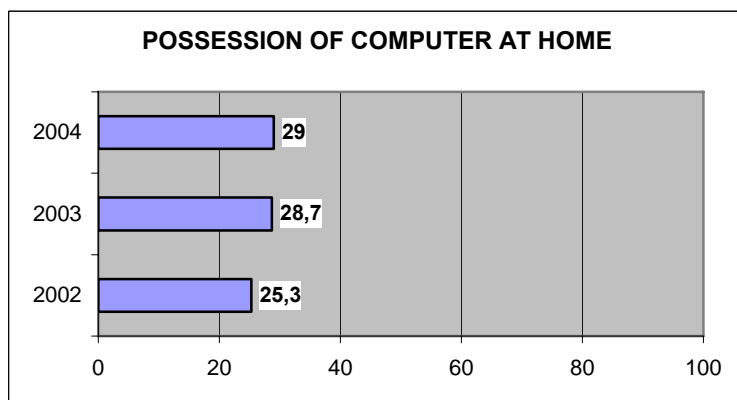
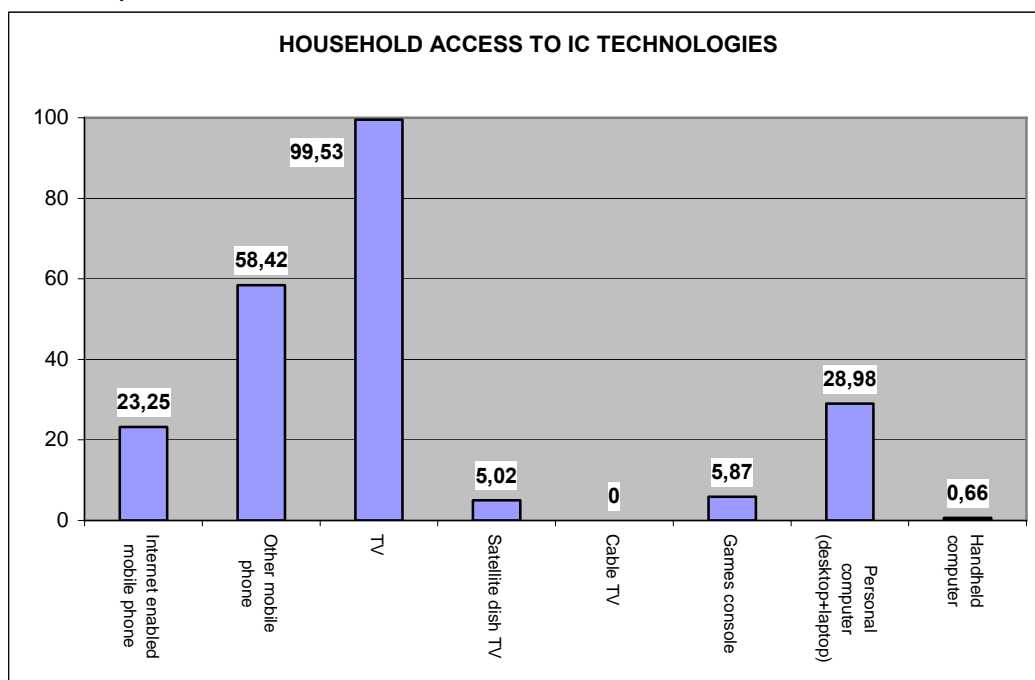
Also, of great importance in order to come to the correct conclusions is the educational level completed by the reference population. More than half population (64,5%) has completed medium and high education, that is ISCED levels 2, 3, 4 (secondary +post secondary education) and 5, 6 (tertiary education –Technical Educational Institutes, Universities, Master, PhD).



Teleworking is a new method of working demanding the use of information and communication technologies. According to the survey results teleworking, presenting only a slight increase appears with percentage of 0,16%.

USAGE OF IC TECHNOLOGIES

From the results of the survey it is evident that almost all Greek households possess conventional analogue TV, with percentage 99,53%, while the percentages for satellite dish connected to TV (Nova) are 5,02%. Mobile phone, either internet enabled or not enabled, (at least one, since question was directed to households and not to members) possesses 76% of the Greek households, while the percentage of possession of internet enabled mobile phones alone is 23,25% and for not enabled 58,42%. Compared to 2003 results, households possessing internet enabled mobile phone have increased by 6%, while these with not enabled mobile phones have decreased by 4%. 29% of Greek households have personal computer (desktop or portable) at home and only 0,66% of them have handheld (palmtop) computer. New item for this years survey is games' console which possess 6% of Greek households



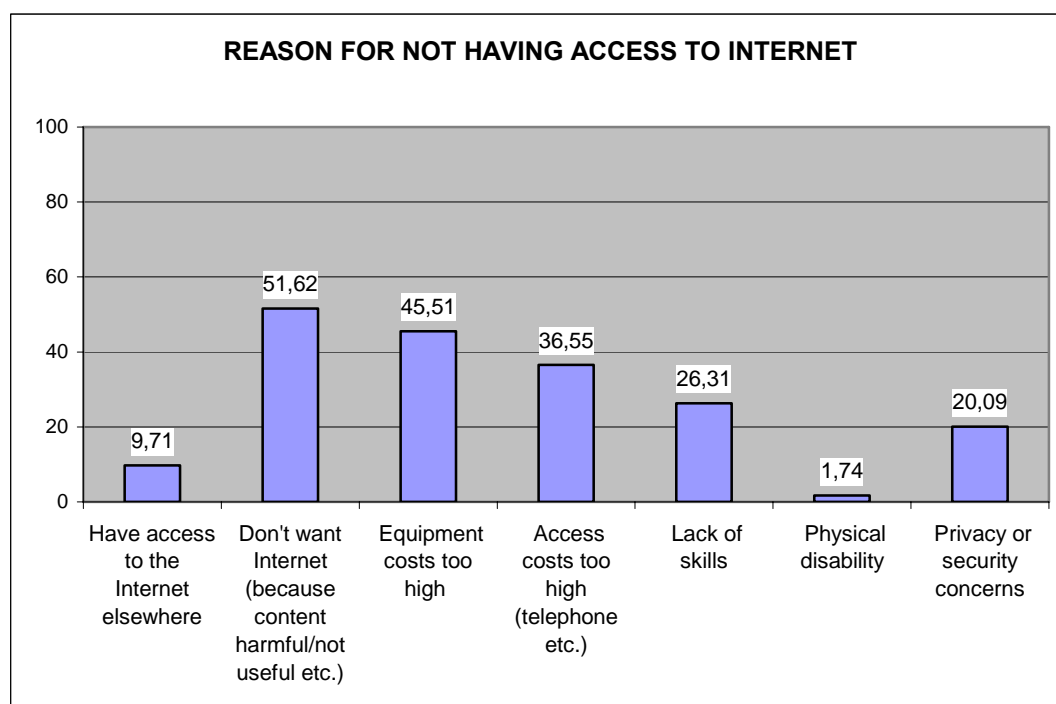
As presented in the adjacent graph, the percentages of Greek households' having personal computer (desktop or portable) at home, are increased.

Households have access to internet at home at a percentage households main devices used for accessing the internet are :

- Desktop or portable computer 98,29%
- Handheld computer 0,54 %
- Digital TV or set top box 0,69%
- Mobile phone (WAP, GPRS, UMTS) 4,89%
- Games console 1,42%
- Other device 1,12%

As far as type of connection used is concerned, results are as following:

- Modem (dial-up access over normal telephone line) : 72,04%
- ISDN 28,51%
- DSL (xDSL, ADSL, SDSL etc.) < 2 Mb/sec : 0,32%
- DSL (xDSL, ADSL, SDSL etc.) >=2 Mb/sec : 0,71%
- Other Broadband connection 0,37%
- Wireless connection (e.g. satellite, mobile phone) 2,28%



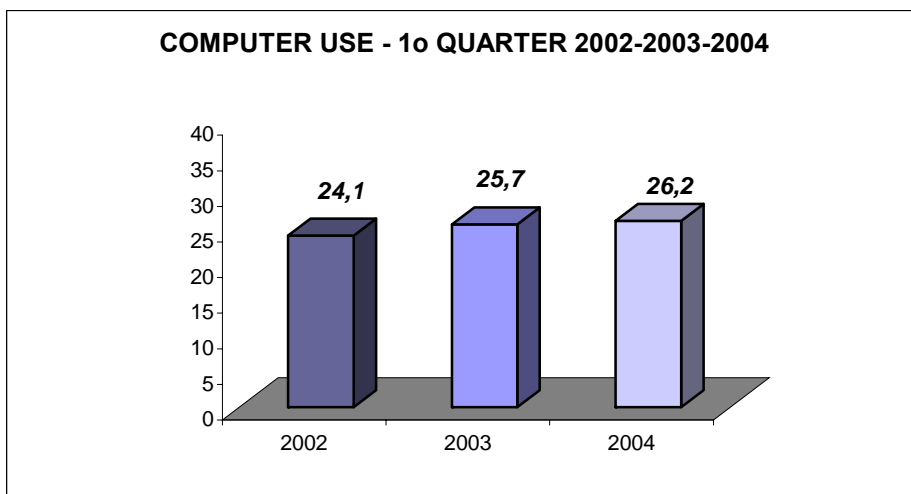
The main reasons for not having access to Internet at home were collected at individual level and data are as following:

- “Don’t want / internet content not useful/ harmful” : 51,62%
- “Equipment costs too high” : 45,51%
- “Access costs too high (telephone cost, etc.)” : 36,55%
- “Lack of skills” : 26,31%

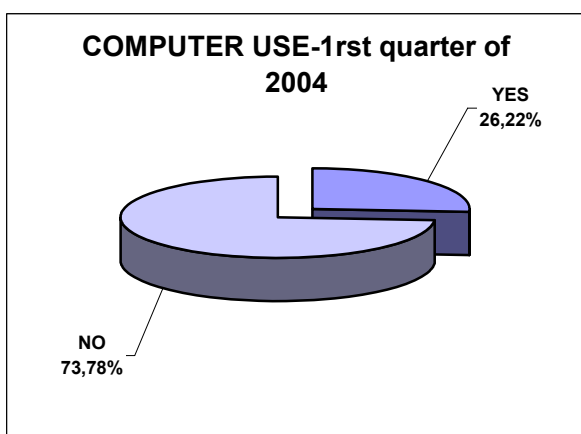
Privacy or security concerns come next with 20,09%, presenting an increase since last year by approximately 10%, while access from another place also presents an increased percentage reaching 9,70%.

Comparing data from all three years of the survey’s conduction we note that as main reason remains the unusefulness of the internet or the harmful content of it. In any case from the year 2002 relative percentages present a significant decrease by approximately 11%, exhibiting that people get more and more familiar with new technologies.

COMPUTER USE - LOCATION, FREQUENCY OF USE, ACTIVITIES



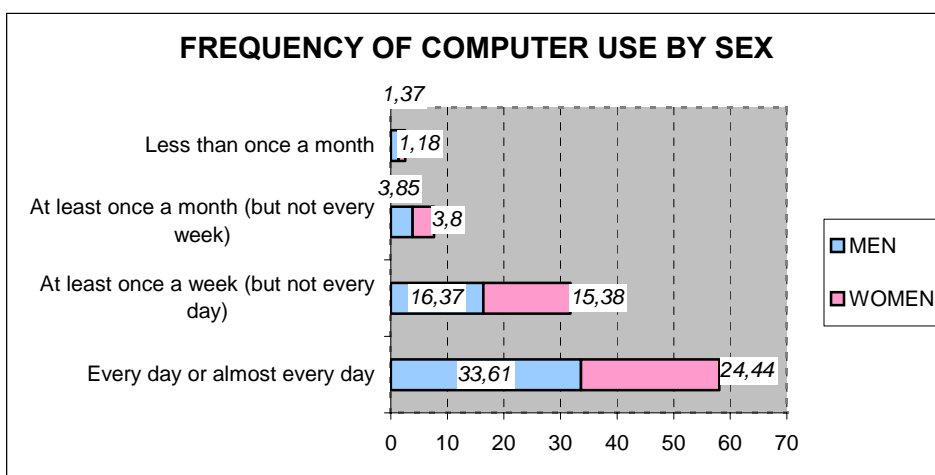
The histogram shows the longitudinal change in computer use, in the past two years, 2002-2004.



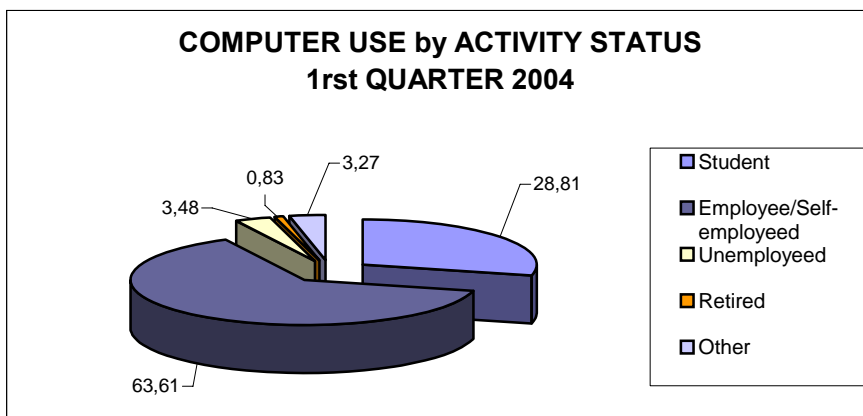
As presented in the adjacent pie, during the first quarter of the year 2004, 26,22% of the population used a computer. The percentage of population having used computer in the 12 month period April 2003-March 2004 is 28,56%.

As far as the frequency of use is concerned 58,05% of computer users, during the 1rst quarter of 2004, use the computer every day or almost every day. Considering as regular use, every day/almost every day use or use at least

once a week, regular use of computer makes 90% of total reference population, having made use during the 1rst quarter of 2004.

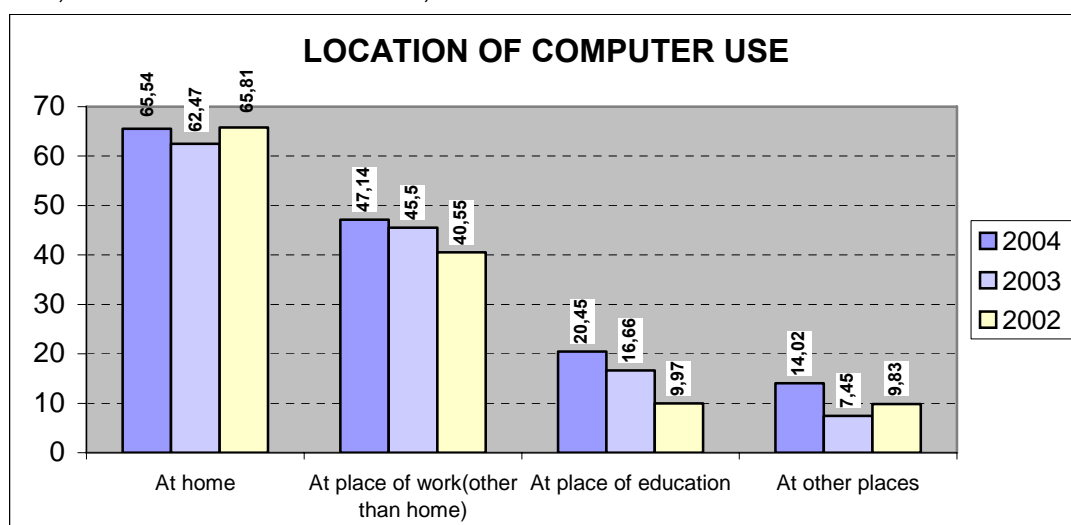


As shown in adjacent histogram, 50% of persons having made regular computer use during the 1rst quarter of the year are men and 40% are women.



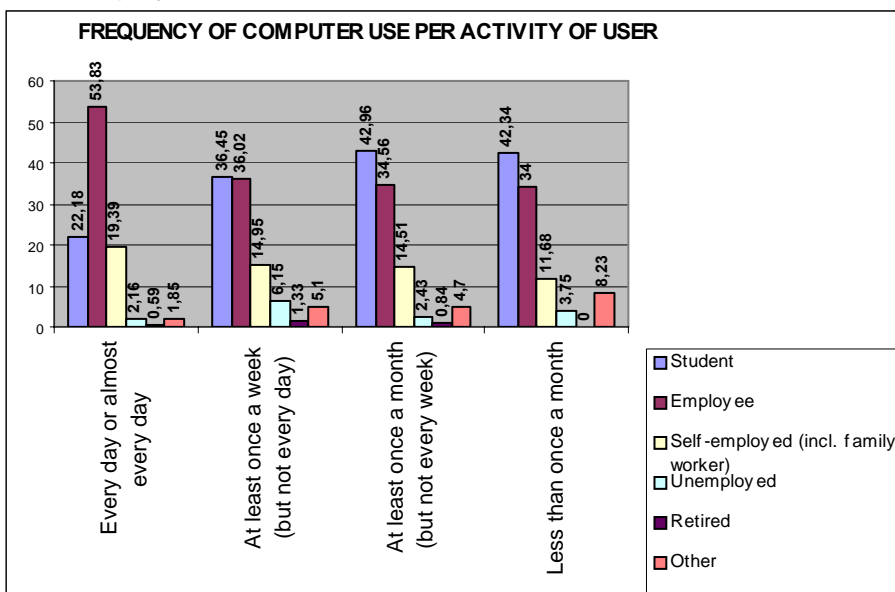
The majority of computer users – 63,61% are working persons (employees, self-employed, family workers) and students come next with 28,81%.

Persons having used the computer (1st quarter 2004) mostly used it at home (65,54%). Use at place of work makes 47,14 % of reference population and at place of education 20,45%. As far as other places are concerned use at other friends' / relatives/ houses makes 6,37% and at internet cafés 7,83%.



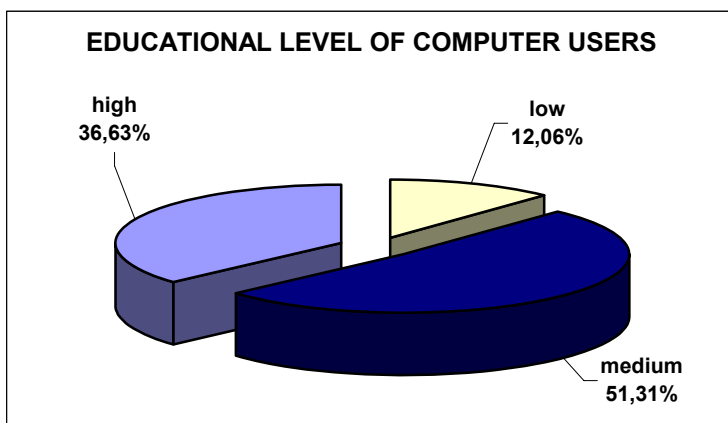
While percentages of use at home remain, since 2002, at almost the same levels, there is an increase in percentages of use at place of work (other than home) by 6,5% and at place of education by more than 10%.

In order to have a more complete picture of computer users, we should make a close look in the employment situation as well as to their educational level.



Employees come first (53,83%) in every day use, while relative percentages for unemployed and retired are very low.

Students present higher percentages of use in the other three frequencies (at least once a week: 36,45%, at least once a month: 42,96%, less than once a month: 42,34%).

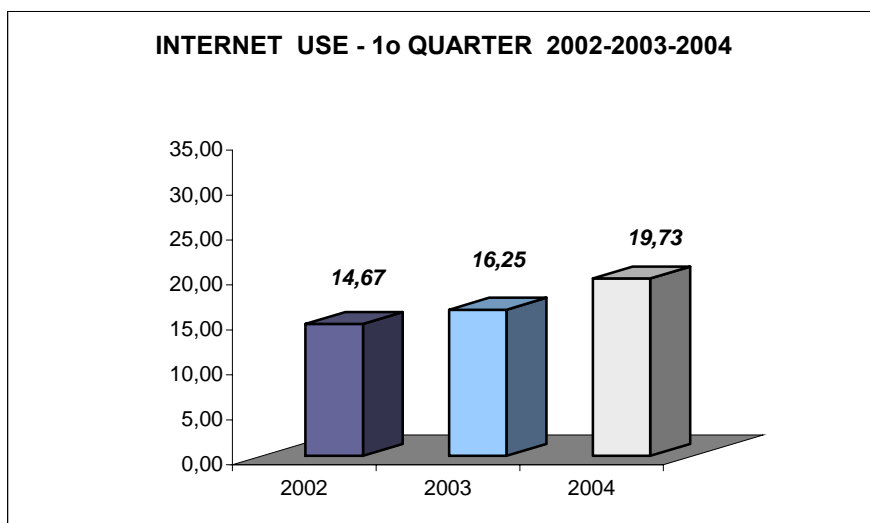


As pre-mentioned in “Basic concepts” as low educational level is considered pre-primary and primary education, as medium secondary and post secondary education and finally, as high tertiary education (ISCED 5+6). Hence, the profile of the computer user is a working person, aged 16 - 34, of medium educational level.

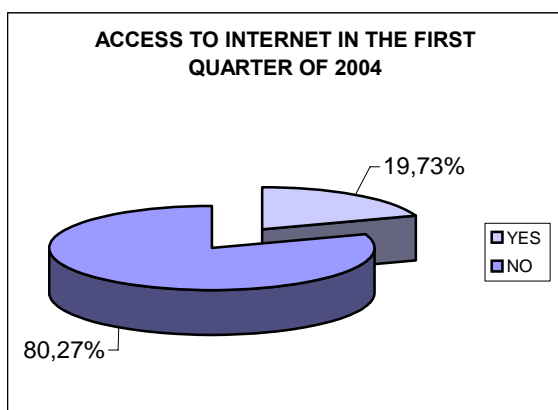
COMPUTER USES	%
Using a mouse to launch programs such as an Internet browser or word processor	92,37
Copying or moving a file or folder	78
Using copy or cut and paste tools to duplicate or move information on screen	69,87
Sending e-mail with attached files	60,86
Using basic arithmetic formulae to add, subtract, multiply or divide figures in a spreadsheet	54,22
Creating a web page or an electronic presentation	12,96
Writing a computer program using a specialized programming language	12,87

The above table presents a wide range of uses, from the simplest (using a mouse to launch programs such as an Internet browser or word processor) to the more complicated and difficult (writing a computer program using a specialized programming language/ or creating a web page or an electronic presentation). Except from the last (g) use all others present an increase comparing to figures of the 2003 survey.

USE OF INTERNET- LOCATION, FREQUENCY OF USE, ACTIVITIES

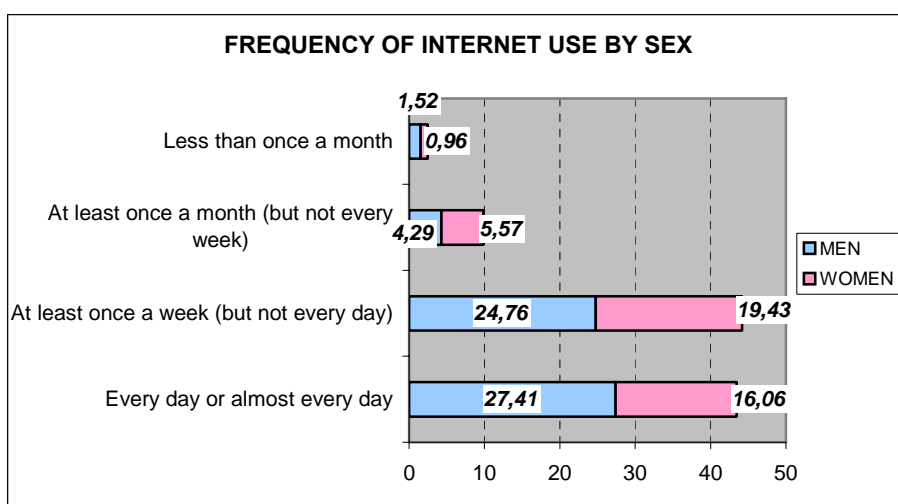


The longitudinal change in internet access, in the past two years, is presented in the histogram.

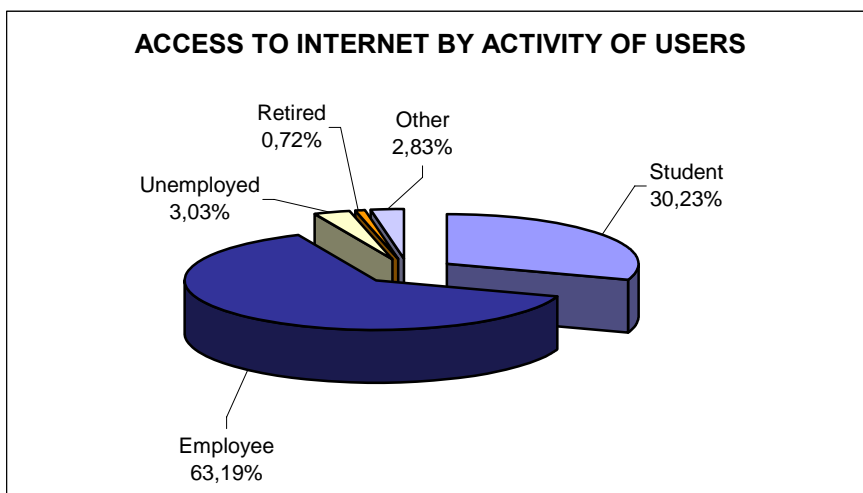


As presented in the adjacent pie, during the first quarter of the year 2004, 19,73% of total reference (aged 16-74) population accessed the internet. The same percentage for the 12 month period April 2003-March 2004 is 21,42%.

As far as the frequency of using the internet, is concerned, 44,19% of persons having accessed the internet, during the 1st quarter of 2004, access the internet at least once a week but not every day. Regularly accesses the internet 88% of

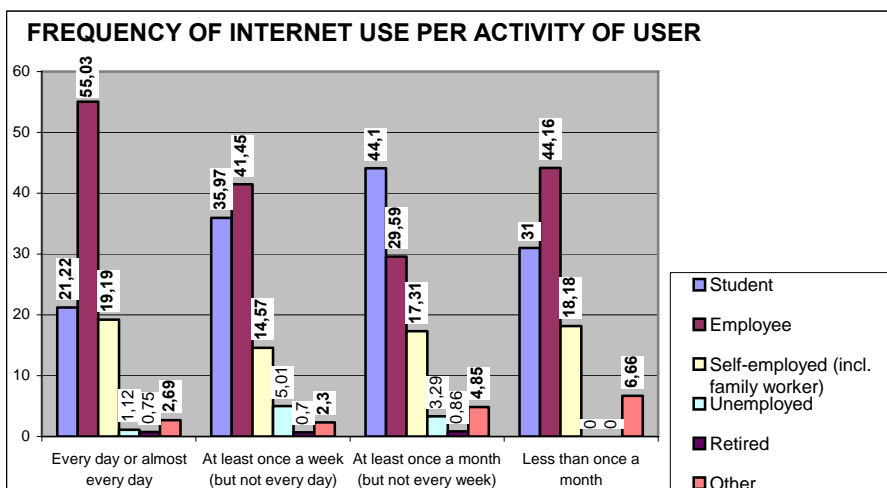
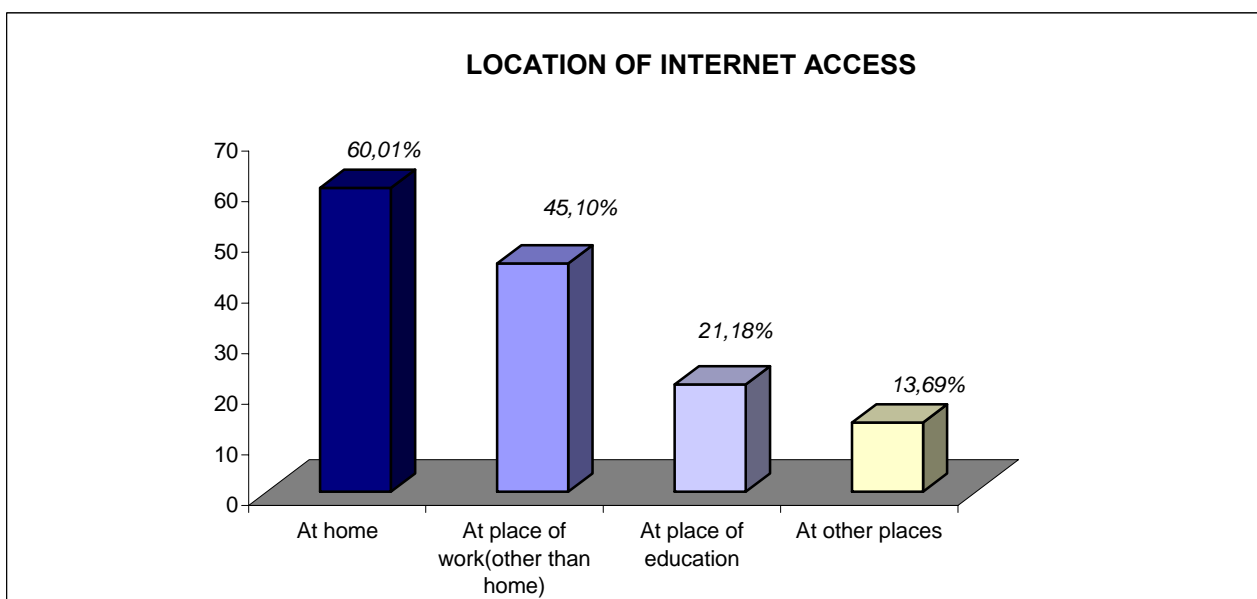


total reference population, having accessed the internet during the 1st quarter of 2004. As shown in the adjacent histogram, 52% of persons regularly accessing the internet are men and 35,49% are women.

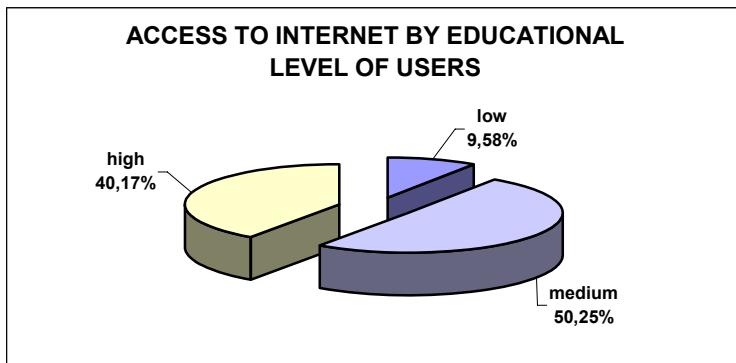


As in computer users, the majority (63,19%) of persons accessing the internet are working persons (employees, self-employed, family workers) and students come next with 30,23%.

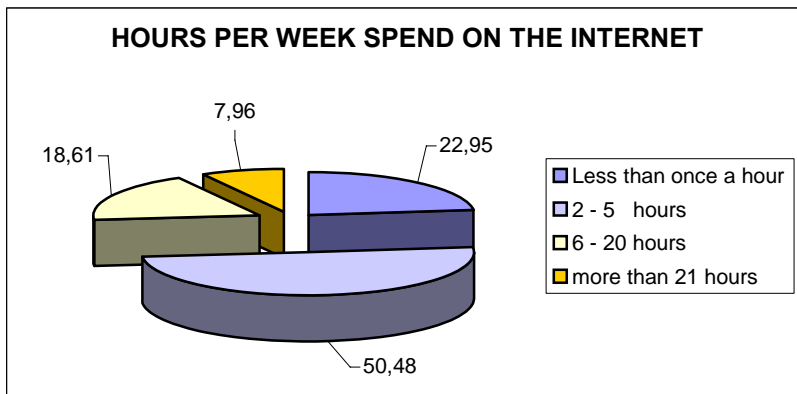
Persons access the internet mostly from home (60,01%). Access from other places is as in the following histogram. As also in computer use, percentage for accessing the internet from the place of education presents an increase, in the past two years, by more than 11%.



Employees come first (55,03%) in regular use, while students with 44,1% come first in use of internet at least once a month but not every week.



Also taking into consideration the educational level of persons accessing the internet, the profile of the person accessing the internet, is a working person, aged 16 - 34, of medium educational level.

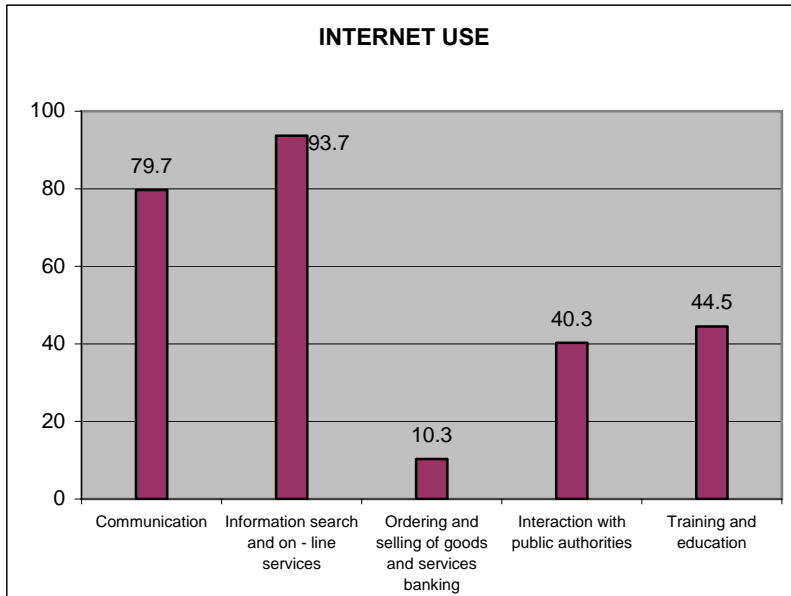


Hours spent on internet (active use) are as the adjacent pie. Use for up to 5 hours present an increase of approximately 5% since last year, while use from 6 to 20 hours present decrease.

Interesting resulting information also is the security precautions taken by internet users, which present an increase, since last year. More specifically 43,02% of reference population, installed a virus checking program (3% increase), 30,73% updated a virus checking program (including manual updating), 18,82% used online authentication (such as a password, PIN, or a digital signature) on the Internet and 12,96% installed or upgraded a hardware or software firewall.

PURPOSES AND NATURE OF ACTIVITIES ON THE INTERNET

Another important information resulting from the survey, are the personal reasons for which, internet users access it. Reference period is again the first quarter of 2004.



As shown in the adjacent histogram, the main category of reason for accessing the internet is information search and on-line services with percentage 93,7% and then follows communication with 79,7%.

Communication 79,7%

Sending/ receiving e-mails is the main use in this category with 78,16%, presenting a slight increase comparing to that of 2003 survey 76,09%.

Information search and on-line services 93,7%

Finding information about goods and services with 68,98% and reading / downloading online newspapers / news magazines with 57,14% are the two major uses in the category.

Ordering and selling of goods and services, banking 10,3%

This is the category with the lowest access percentage. Main reason for use is internet banking 6,58% and then follows Purchasing / ordering goods or services (excl. shares / financial services) with 4,61%.

Interaction with public authorities 40,3%

Downloading official forms (14,25%) are first and then follows sending filled in forms with 12,08%.

Training and education 44,5%

Web cites containing information about formalised educational activities (school, university, etc.) are the mostly used with percentage 39,58% in this category

Analytically, percentages for all uses are as following:

PERSONAL REASONS FOR ACCESSING THE INTERNET	%
<i>Communication</i> 79.7	
a) Sending / receiving e-mails	78.16
b) Telephoning over the Internet / Videoconferencing	5.38
c) Other (use of chat sites etc.)	23.74
<i>Information search and on-line services</i> 93.7	
d) Finding information about goods and services	68.98
e) Using services related to travel and accommodation	52.12
f) Listening to Web radios / watching Web television	21.74
g) Playing or downloading games, images or music	55.18
h) Reading / downloading online newspapers / news magazines	57.14
i) Looking for a job or sending a job application	8.12
<i>Ordering and selling of goods and services, banking</i> 10.3	
j) Internet banking	6.58
k) Other financial services (e.g. shares purchasing)	1.32
l) Purchasing / ordering goods or services (excl. shares / financial services)	4.61
m) Selling goods and services (e.g. via auctions)	1
<i>Interaction with public authorities</i> 40.3	
n) Obtaining information from public authorities web sites	36.5
o) Downloading official forms	14.25
p) Sending filled in forms	12.08
<i>Training and education</i> 44.5	
q) Formalised educational activities (school, university, etc.)	39.58
r) Post educational courses	26.56
s) Other educational courses related specifically to employment	18.42

Use if internet by age groups

16 -24 years old

Main reasons for accessing the internet:

Formalised educational activities (school, university, etc.)	56,83%
Post educational courses	54,20%
Other educational courses related specifically to employment	50,83%
Playing or downloading games, images or music	46,99%
Other (use of chat sites etc.)	44,76%

At this age group financial services (e.g. shares purchasing) appear with zero percentage.

25 -34 years old

Main reasons for accessing the internet:

Looking for a job or sending a job application	51,65%
Purchasing / ordering goods or services (excl. shares / financial services)	42,73%

Sending filled in forms	42,44%
Telephoning over the internet / videoconferencing	39,37%
Internet banking	38,84%

At this age group obtaining information about formalized educational activities (school, university, etc.) appears with percentage 21,00%.

35 -44 years old

Main reasons for accessing the internet:

Other financial services (e.g. shares purchasing)	49,48%
Sending filled in forms	31,28%
Selling goods and services (e.g. via auctions)	30,61%
Purchasing / ordering goods or services (excl. shares / financial services)	29,06%
Downloading official forms	27,19%

At this age group looking for a job or sending a job application is last appearing with percentage 7,71%.

45 -54 years old

Main reasons for accessing the internet:

Other financial services (e.g. shares purchasing)	28,06%
Selling goods and services (e.g. via auctions)	26,35%
Internet banking	18,74%
Purchasing / ordering goods or services (excl. shares / financial services)	17,02%
Sending filled in forms	11,37%

Last appearing with percentage 4,58 is telephoning over the Internet / videoconferencing.

55 -64 years old

Main reasons for accessing the internet:

Obtaining information from public authorities web sites	2,99%
Reading / downloading online newspapers / news magazines	2,31%
Finding information about goods and services	2,18%
Sending / receiving e-mails	2,08%
Sending filled in forms	1,73%

At this age group several uses of access present zero percentages, such as purchasing / ordering goods or services (excl. shares / financial services), selling goods and services (e.g. via auctions), looking for a job or sending a job application, telephoning over the Internet / Videoconferencing, etc.

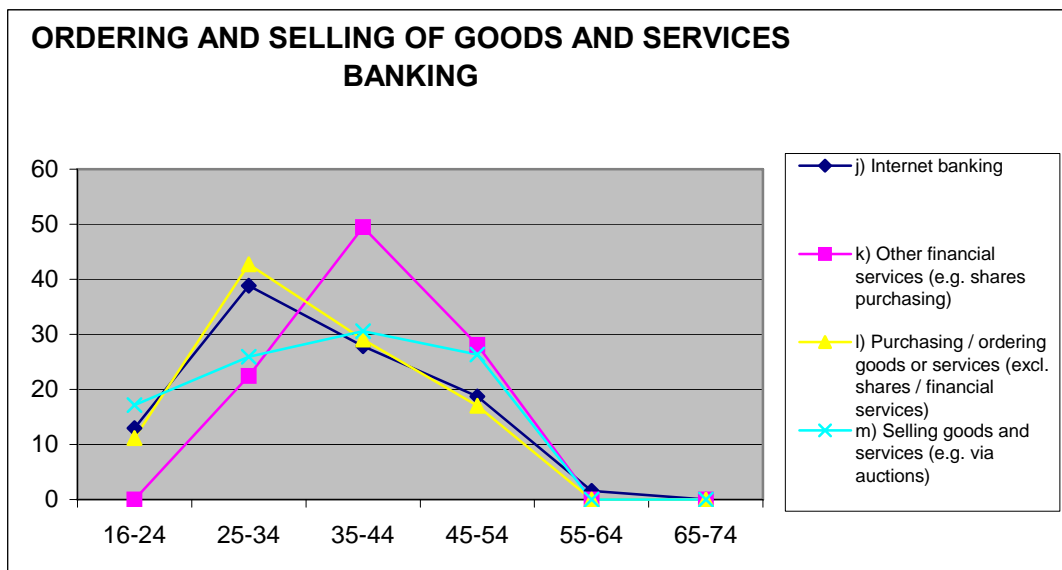
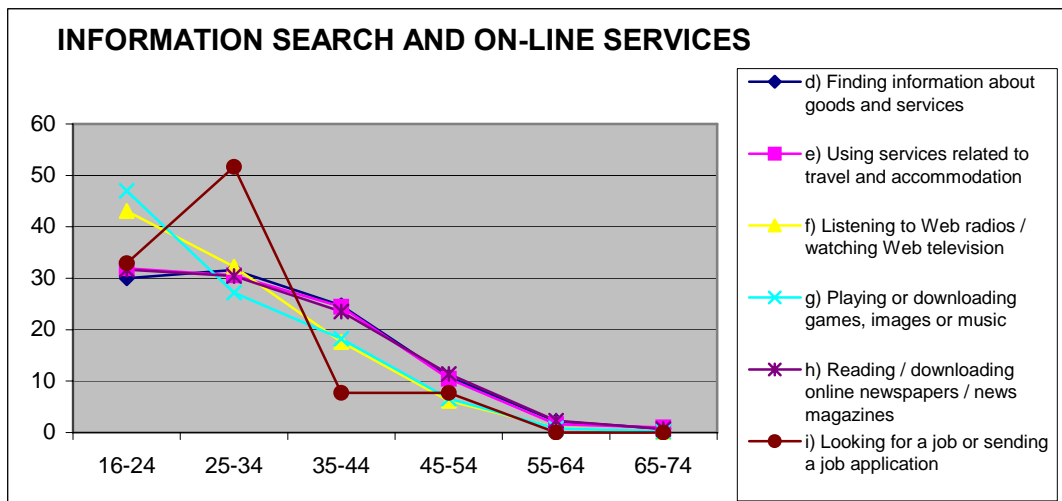
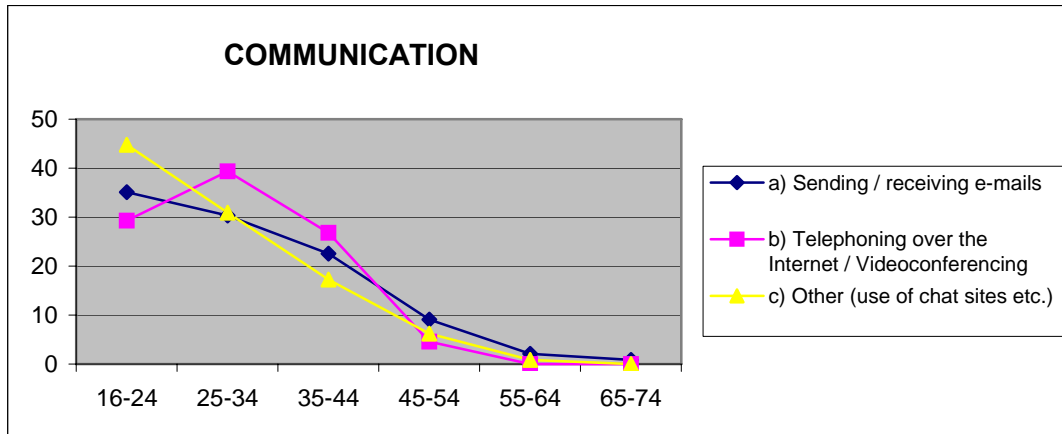
65 -74 years old

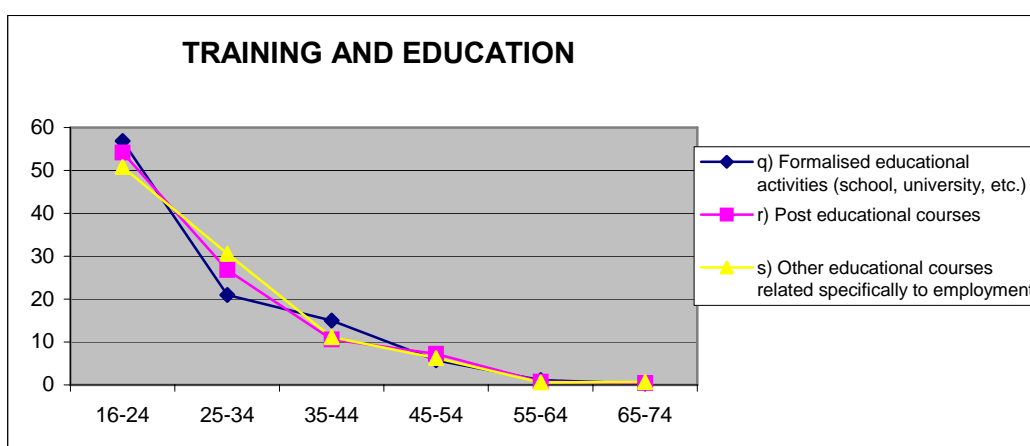
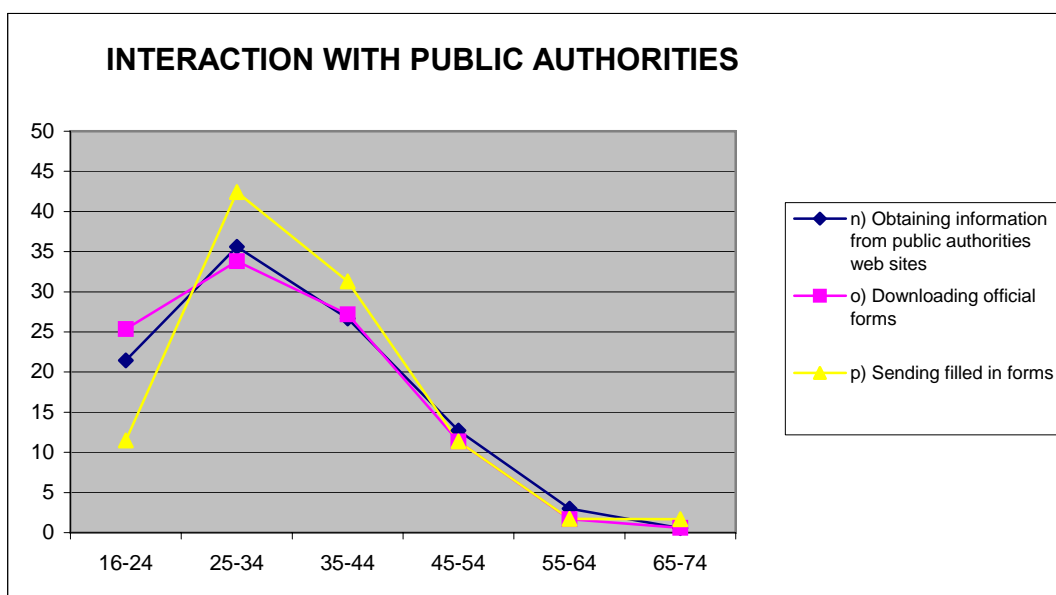
Main reasons for accessing the internet:

Sending filled in forms	1,69%
Using services related to travel and accommodation	1,01%
Sending / receiving e-mails	0,88%
Finding information about goods and services	0,75%
Reading / downloading online newspapers / news magazines	0,71%

At this age group several uses of access present almost zero percentages, as also the pre-mentioned main reasons.

Graphs of INTERNET use per age groups





Health related activities over the internet

Separate category for accessing the internet (first quarter of 2004) for private reasons or for friends/ relatives has as reference web pages on health issues. As following, the percentages of reference population having accessed the internet for the specific reasons, with the only exception of seeking health information (e.g. injury, disease, nutrition, improving health etc.), are very low.

Seeking health information (e.g. injury, disease, nutrition, improving health etc.)	30,9%
Making an appointment online with a practitioner	6,83%
Requesting a prescription online from a practitioner	6,63%
Seeking medical advice online from a practitioner	6,63%

The table following, presents the percentages of access for the above reasons and by frequency

	<i>Daily</i>	<i>Weekly</i>	<i>Monthly</i>	<i>Sometimes</i>
Seeking health information (e.g. injury, disease, nutrition, improving health etc.)	5,92%	65,39%	1,23%	27,46%
Making an appointment online with a practitioner	1,86%	88,08%	1,67%	8,39%
Requesting a prescription online from a practitioner	1,91%	90,80%	1,72%	5,57%
Seeking medical advice online from a practitioner	1,91%	90,80%	1,72%	5,57%

Of interest is also information given from the results of the survey on security problems encountered through using the Internet. Main problems are receiving unsolicited emails sent through using the internet with percentage 26,98% and computer virus resulting in loss of information or time with 11,99%.

INTERNET COMMERCE – ACTIVITIES AND BARRIERS

On internet commerce, percentage 6,33% of reference population appears to have ordered/ bought goods or services for private use (excluding financial investments) over the internet during the time period April 2003 – March 2004. More specifically during the first quarter of 2004 3,94% of population made orders/ boughts. Goods or services having been ordered or bought during the last 12 months mainly are books, magazines, newspapers, e-Learning material, etc. (41,27%), services on travel and holiday accommodation (29,43%) and computer hardware (incl. accessories for upgrading PC eg. memory, hard disk, graphic cards etc.) (27,94%).

Products and Services	Estimated percentage of purchases
1. Food / Groceries	1,45%
2. Films (videos, dvd etc.), music systems, cd's, photographic films	26,25%
3. Books/ Magazines/ E-learning material	41,27%
4. Clothes, sports goods	12,28%
5. Computer software (incl. Video games)	13,62%
6. Computer hardware (incl. accessories for upgrading PC eg. memory, hard disk, graphic cards etc.)	27,94%
7. Electronic equipment (incl. cameras, megaphones etc.)	3,82%
8. Share purchases / Financial services /Insurances	3,23%
9. Travel and holiday accommodation	29,43%
10. Tickets for events (conferences, theater, etc.)	11,65%
11. Lotteries and betting	4,00%
12. Other._	1,49%

It seems that problems encountered when making orders over the Internet are not many, while main problems are the final price being higher than indicated (4%), not receiving satisfactory response after complaint (3,71%) and the lack of security of payments (2,51%).

