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

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

Final report of the results of the 2002 survey in Greece

Athens, March 2003

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 May-June 2002, according to the timetable of the contract. The achieved questionnaires are as following:
The *initial sample* was 5216 households from which :

- 4032 households have been *fully interviewed* (with answers at least up to question B3),
- 381 households have been interviewed (up to question A3) as having members aged <16 and/or >74
- 134 households have not been interviewed due to denial for cooperation
- 493 households have not been interviewed because contact wasn't made despite making the required call – backs.
- 164 households have not been interviewed because the interview was interrupted.
- 4 households have not been fully interviewed due to temporary absence of the pre-selected person
- 2 households have not been fully interviewed due to death, sickness or incapacity of the pre-selected person
- 6 households have not been fully interviewed due to denial of the pre-selected person (information at household level (questions A1-A3) have been collected).

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.

Sampling – Methodology

The sample of the survey consisted of one of the six rotating panels that make up the Greek Labour Force Survey (LFS). The LFS is a quarterly rotating panel household survey with multistage stratified design that covers the target population of the ICT survey.

Survey technique: Telephone survey.

Sampling unit: In accordance with the general outline of Eurostat's plan for the Household Survey on ICT Usage, the sampling unit was the private household and one individual that was randomly selected among the household members of age 16 to 74 years.

Gross/net sample size. The size of the ICT sample was 5216 households/individuals (LFS third quarter of 2001), of which 4413 responded (84.6% response rate). The number of respondents within the eligible age range (16-74) was 4032.

Sampling frame: The sampling frame for the ICT is the area frame used for the major household and population surveys conducted by the National Statistical Service of Greece (NSSG), and provides complete coverage of the target population of the ICT survey.

Sampling design: The survey used a stratified multistage probability sampling to select the eligible sampling units.

Stratification: The sampling design involves two levels of area stratification: (i) the first level is geographical stratification based on the partition of the total country area into standard administrative regions, corresponding to the established European NUTS II and NUTS III level. The two major city agglomerations (Greater Athens and Greater Thessalonica) constitute separate geographical strata. (ii) the second level involves grouping municipalities and communes by degree of urbanization, i.e., according to their population size (within each Service of Regional Development), into eight categories. The two major city agglomerations are further partitioned into a number of strata on the basis of the city blocks of the municipalities that constitute them.

*Clustering:*The sampling design involves clustering of households in the area units that comprise the area frame. By area unit we mean a part of inhabited area ending at artificial or natural boundaries well defined and identifiable on the ground, by using a map of the locality. Such a unit could be one or more neighbouring blocks, or part of a rural locality with such boundaries.

*Stages of probability sampling:*The sample of private households and associated eligible residents was drawn in three stages. In the first stage of the LFS sampling a random sample of area clusters, the primary sampling units (PSUs), was systematically selected from each stratum with probability proportional to the number of private households in the cluster. In the second stage a systematic random sample of households was drawn, with a pre-fixed sampling rate, from the current population of households (based on a list prepared in the field) of each selected PSU. In the third stage, for the incoming LFS rotation (287 PSUs) one of the residents (aged sixteen to seventy four) of each selected household was selected at random in the field for the ICT survey.

Weighting/calibration: The weights of the ICT sample were properly inflated to account for the use of only one sixth of the LFS sample. The LFS sample is self-weighted (equal weights) within the major NUTS II administrative regions ("superstrata"). The weights of the ICT sample were also adjusted for non-response, and calibrated to the population total (based on demographic projection) for individuals aged 16 to 74.

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 2002 and for most of this time period.

More specifically, members residing in the dwelling during the reference period (first three months of the year 2002), 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 <u>mainly</u> 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:
- day of conduction of the survey (residential status, education, activity status, home based business)
- first 3 months of the year 2002 -January, February, March- (rest of questions).

Training of the interviewers

In the 2002 survey 29 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

❑ **USAGE OF IC TECHNOLOGIES**

From the results of the survey it is evident that almost all Greek households possess conventional analogue TV, with percentage 98,2%, while the percentages for digital terrestrial TV (NOVA, Alpha Digital), and satellite dish connected to TV (Filmnet) are 2,5% and 4% respectively. Mobile phone (at least one, since question was directed to households and not to members) possesses 68,80% of the Greek households while the percentage of possession of internet activated mobile phones is 2%. Answers to that specific item actually correspond to mobile phones having internet activated and not just being internet enabled mobile phones (WAP or GPRS). 23,75% of the households have desktop computer at home and only 1,54% of them have portable computer.
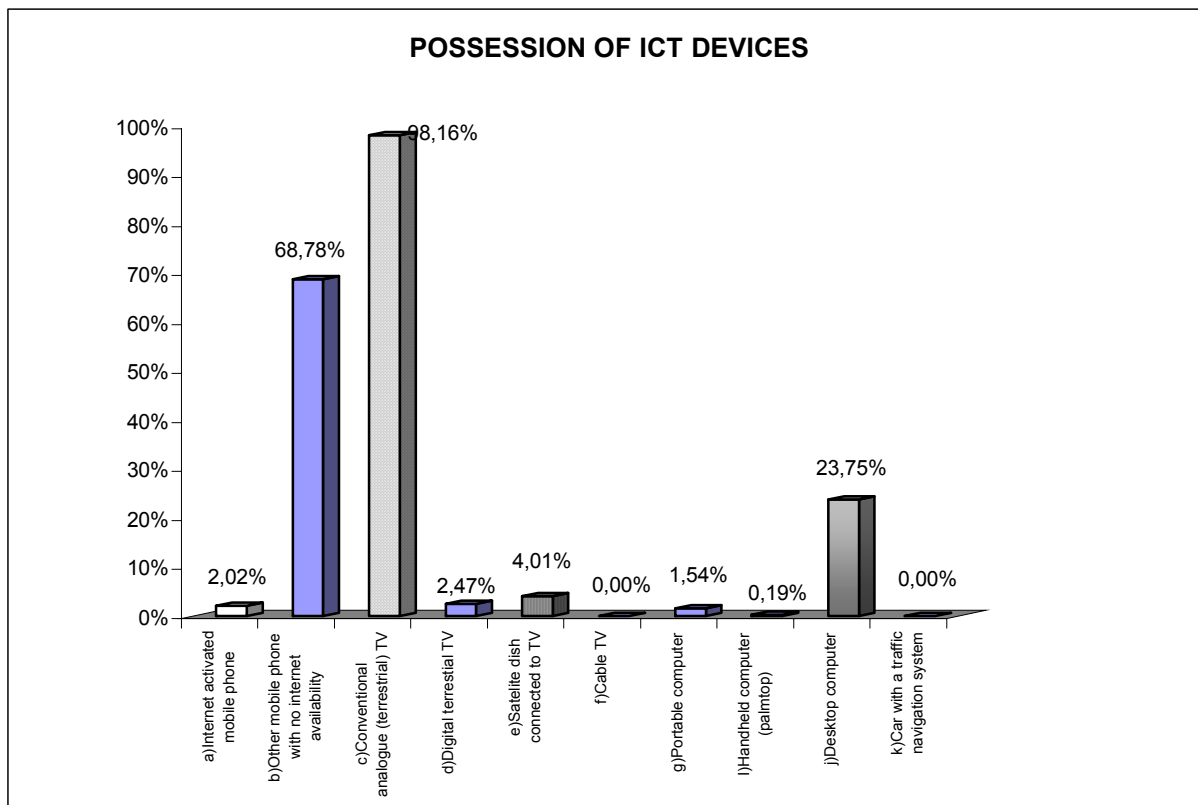
Households have access to internet at home at a percentage of 12,18%. For these households main devices used for internet are :

- Desktop computer 95,8%
- Internet activated mobile phone 6,10%
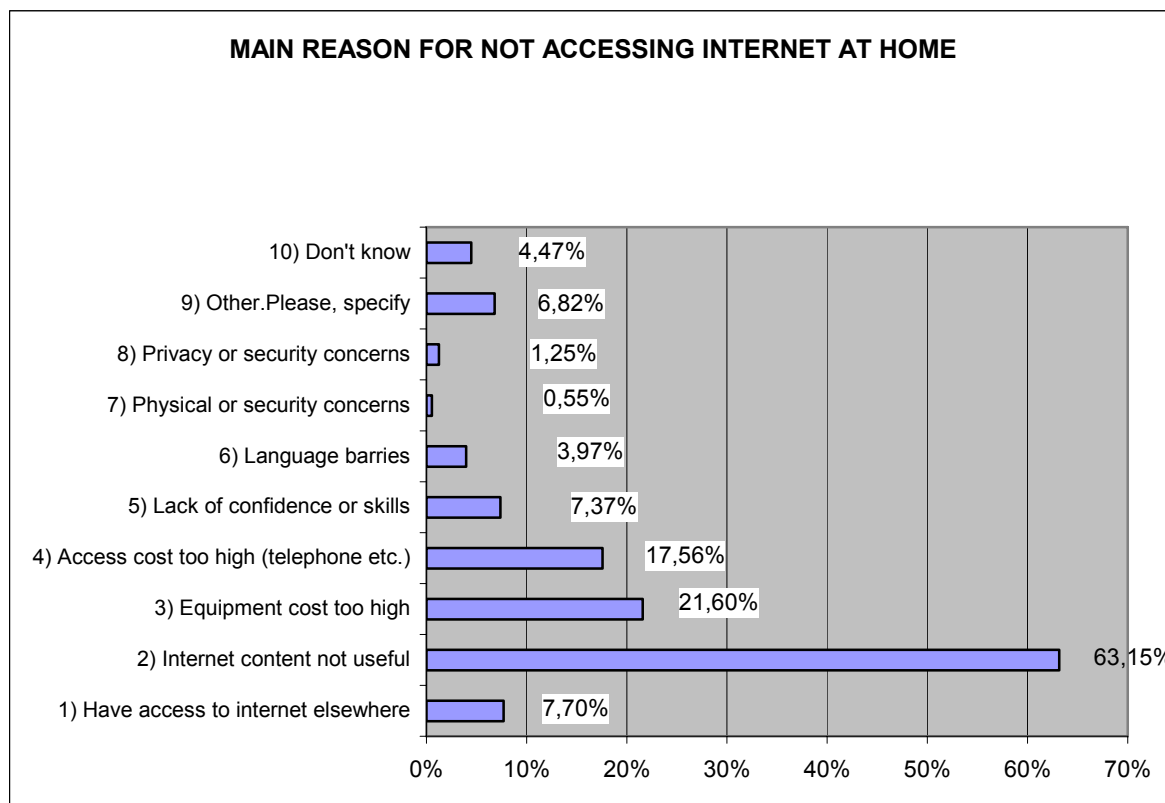- Portable computer 5,71%

The rest of the devices present no answers at all.

Main reasons for not having access to Internet at home are :

- "Don't want / internet content not useful" with 63,15%
- "Equipment costs too high" with 21,6%
- "Access costs too high (telephone, etc.) with 17,6%

Privacy or security concerns only present 1,25%. As other reasons have been recorded "due to age", "due to lack of time", "will buy later, for children", etc.

Relative graph is presented below, for males and females.

MAIN REASON FOR NOT ACCESSING INTERNET AT HOME

Reason	%
10) Don't know	4,47%
9) Other.Please, specify	6,82%
8) Privacy or security concerns	1,25%
7) Physical or security concerns	0,55%
6) Language barries	3,97%
5) Lack of confidence or skills	7,37%
4) Access cost too high (telephone etc.)	17,56%
3) Equipment cost too high	21,60%
2) Internet content not useful	63,15%
1) Have access to internet elsewhere	7,70%

Personal home page/web site, despite low cost for it's construction, have only 4,6% of persons accessing internet at home.

**PERSONAL HOME PAGE-WEB SITE**

Yes 4,62%
No 95,38%
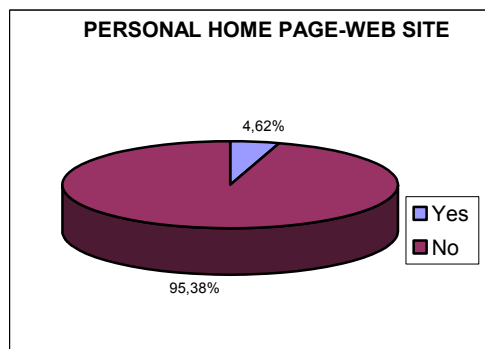
❑　　　　　**USE OF COMPUTERS – LOCATION, FREQUENCY OF USE**

Reference period for the use of computers are the first three months of the year 2002. The questions referring to information listed below, have been addressed to pre-selected members of the households (at individual level). So, the percentage of persons having used a computer, during the first trimester of 2002 is 24,1%.
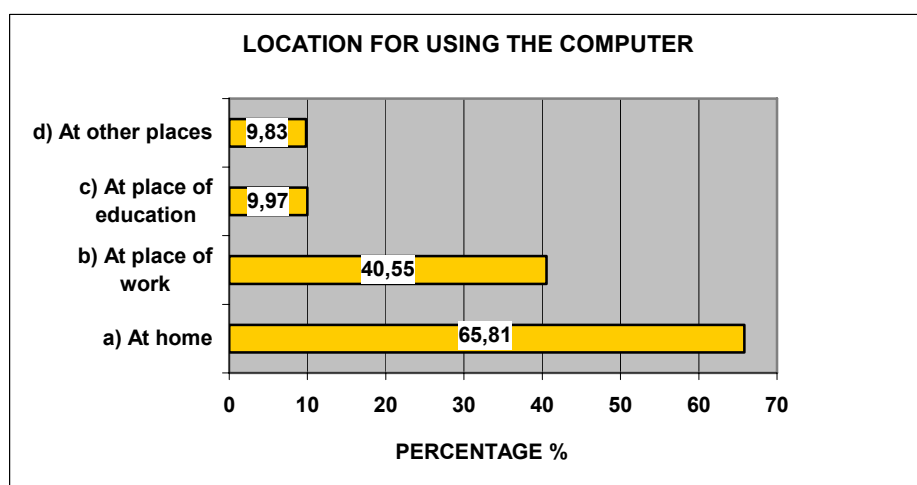
The distribution of persons having used computers by sex is:
- Men 57,1%
- Women 42,9%

USE OF COMPUTER DURING THE 1rst TRIMESTER OF 2002
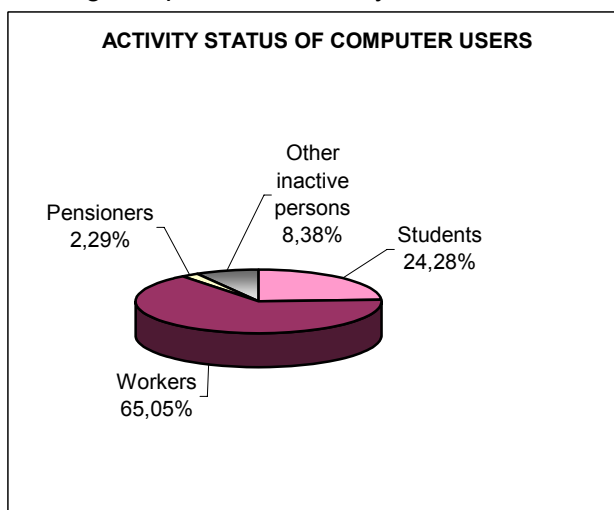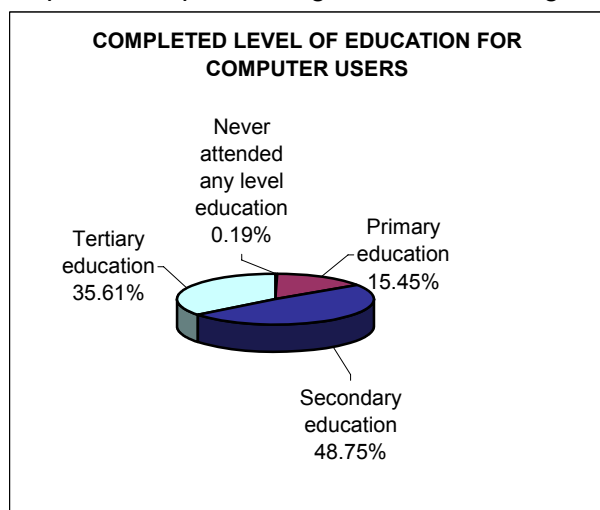
1.Yes 24,13%

2.No 75,87%
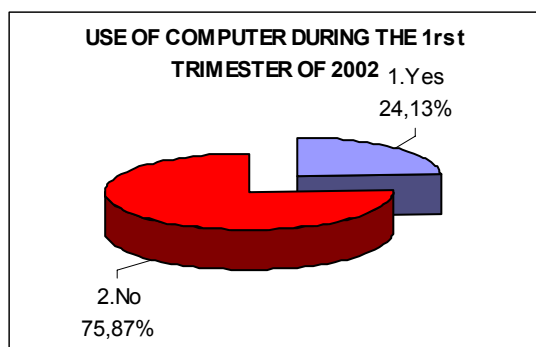
The pre-mentioned percentages on computer use correspond to all places of using PC and for each location separate percentages are shown in the following graph.

It is worth noticing that 9.97% uses computer at place of education. As other places are considered internet cafes, houses of friends, public services, etc.

LOCATION FOR USING THE COMPUTER

d) At other places 9,83

c) At place of education 9,97

b) At place of work 40,55

a) At home 65,81

PERCENTAGE %

At a percentage of 48,8% persons using computer have completed secondary education (ISCED levels 3 and 4) while the 35,6% of them have completed higher education (ISCED levels 5 and 6) .

As far as the activity of persons using computer is concerned, workers (employees, self-employed, family workers) are first with 65% and students follow with 24,3%. Generally, the profile of persons using computers, is persons aged 16-34, working and having completed secondary education.

COMPLETED LEVEL OF EDUCATION FOR COMPUTER USERS

Never attended any level education 0.19%

Tertiary education 35.61%

Primary education 15.45%

Secondary education 48.75%

ACTIVITY STATUS OF COMPUTER USERS

Other inactive persons 8,38%

Pensioners 2,29%

Students 24,28%

Workers 65,05%

The diagram for the frequency of using PC at home, is presented together with access at Internet in the next section. Use "at least once a day" at home makes 37,85% of population having made use of computer during the 1rst trimester of 2002, while at place of education and at other places higher frequency of use is "at least once a week but not every day", with percentages 5,51% and 7,49% respectively.

❑   **USE OF INTERNET – LOCATION , FREQUENCY OF USE**

Access to internet during the first three months of 2002, have had the 14,67% of population. This percentage refers to use from all different places (home, work, education, other places) and as also mentioned before it is information provided at individual level.

The distribution of members having access to internet by sex is:
▪ Men 59,3%
▪ Women 40,7%
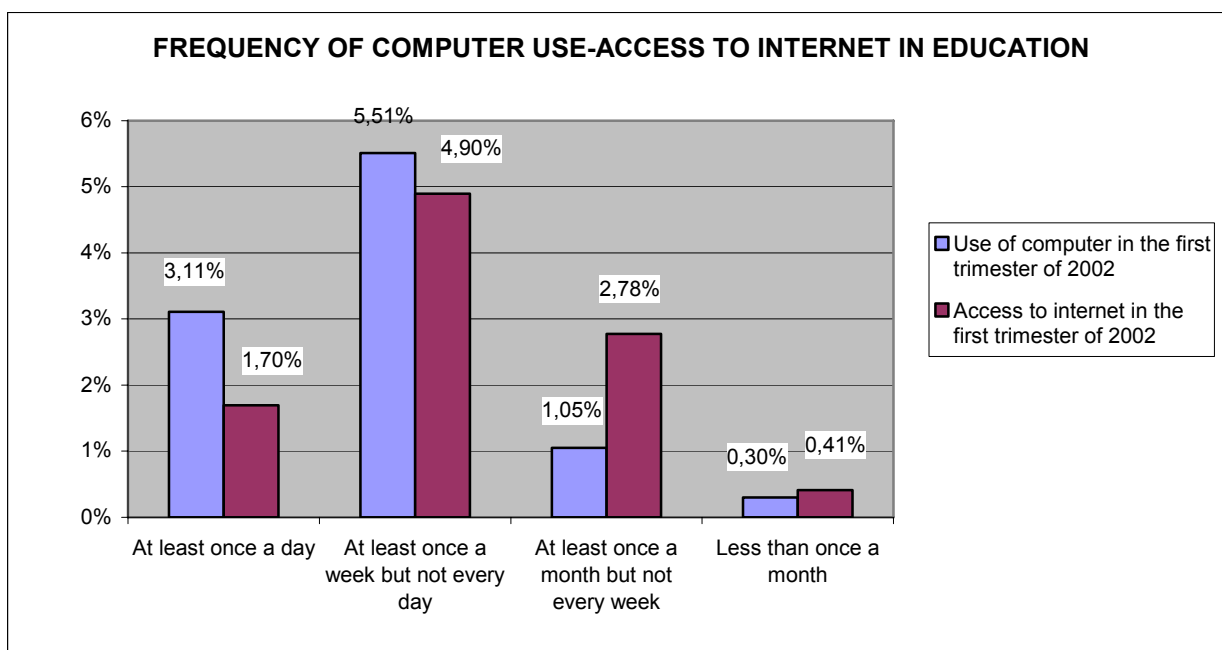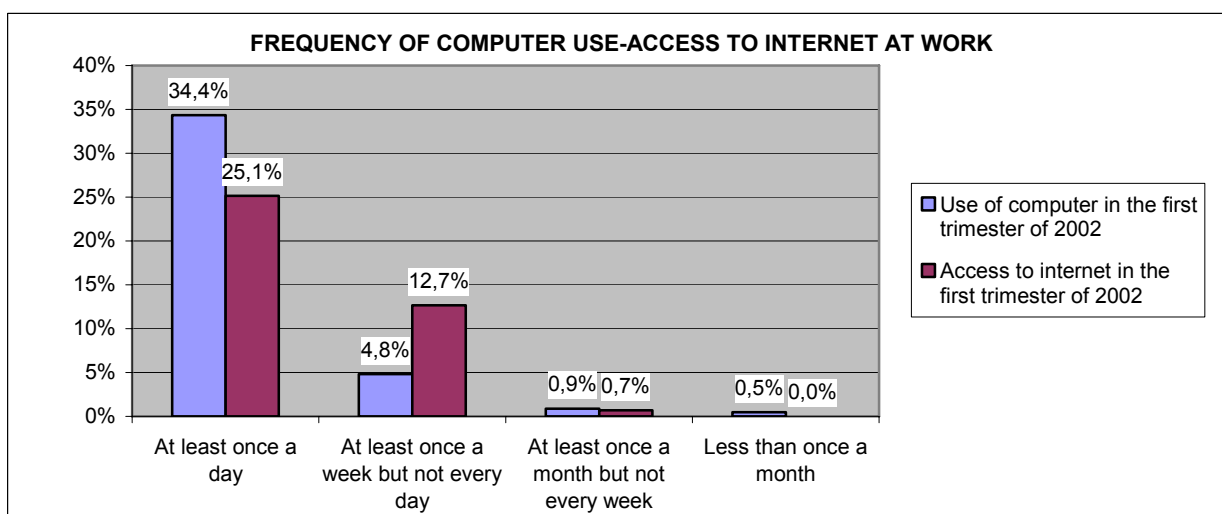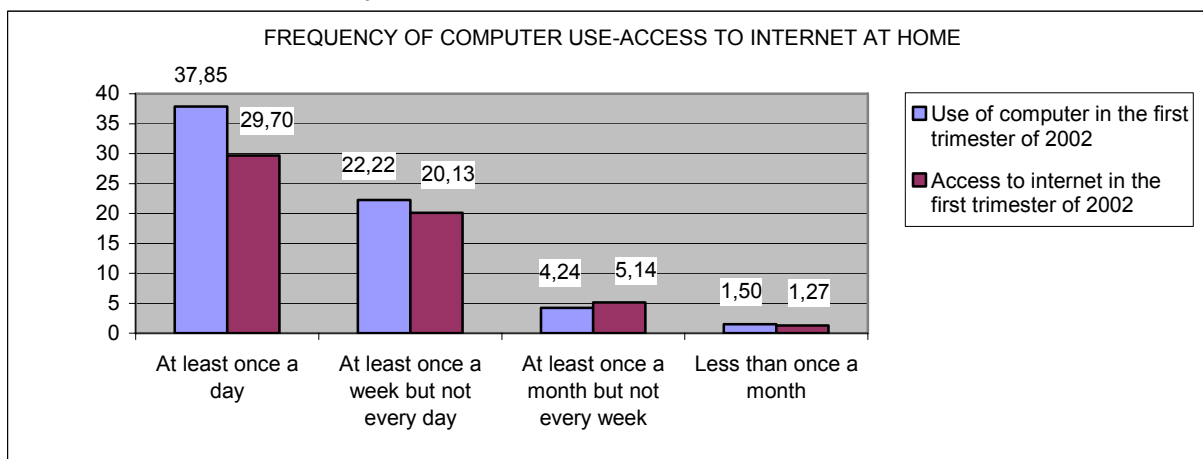Again as other places are considered internet cafes, houses of friends, public services, etc.
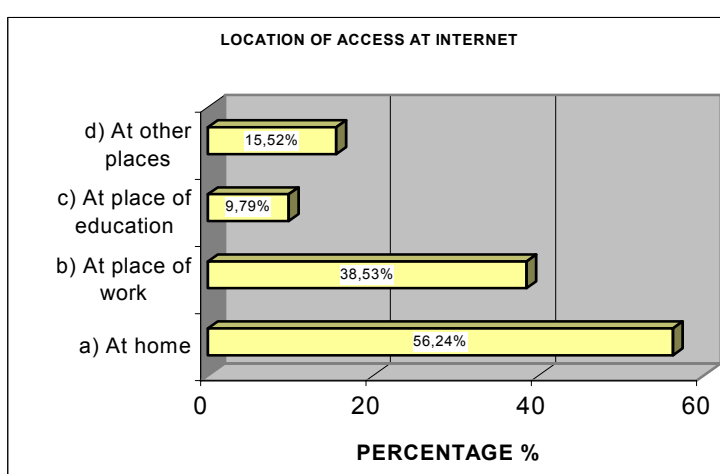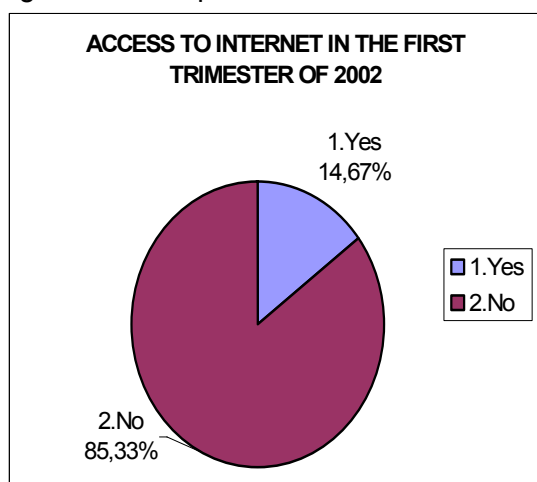
As shown in the graphs, internet is accessed and computer is used, mostly from home and then from the place of work. The distribution of persons by sex is similar for internet access and computer use.
As far as the activity of persons having access at internet they mostly are workers (employees, self-employed, family workers) with percentage 63,6% and then again students follow with percentage 27,03%. In other cases included are housewives, persons in national service, unemployed, men/women of independent means, invalidated/ incapacitated etc.
As far as their education is concerned they have mostly completed secondary education (48,0%).
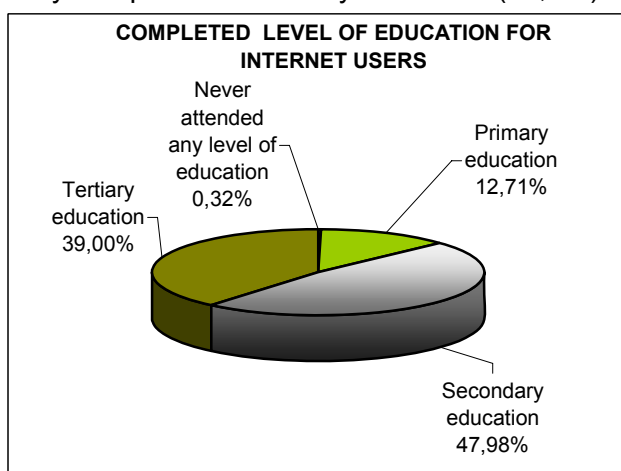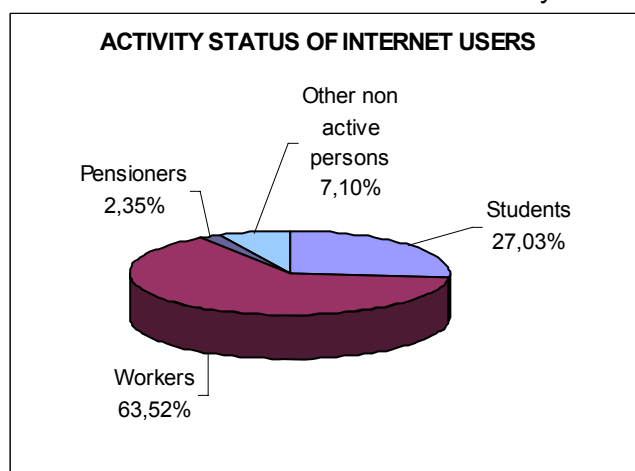
The following diagrams present both the frequency of using computer and having access to internet, for each place of use, separately.

FREQUENCY OF COMPUTER USE-ACCESS TO INTERNET AT HOME

FREQUENCY OF COMPUTER USE-ACCESS TO INTERNET AT WORK

FREQUENCY OF COMPUTER USE-ACCESS TO INTERNET IN EDUCATION

FREQUENCY OF COMPUTER USE-ACCESS TO INTERNET IN OTHER PLACES
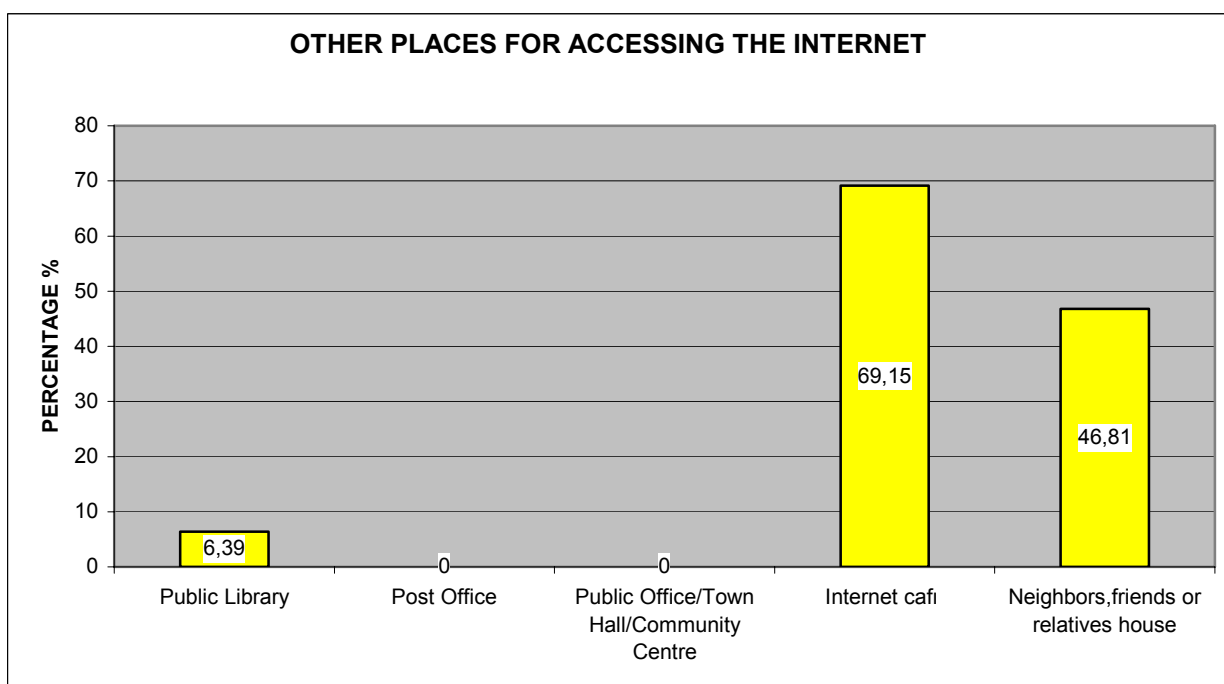
Bars:
- At least once a day: 2,28% / 1,57%
- At least once a week but not every day: 3,61% / 7,49%
- At least once a month but not every week: 2,86% / 4,44%
- Less than once a month: 1,08% / 2,02%

Legend:
- Use of computer in the first trimester of 2002
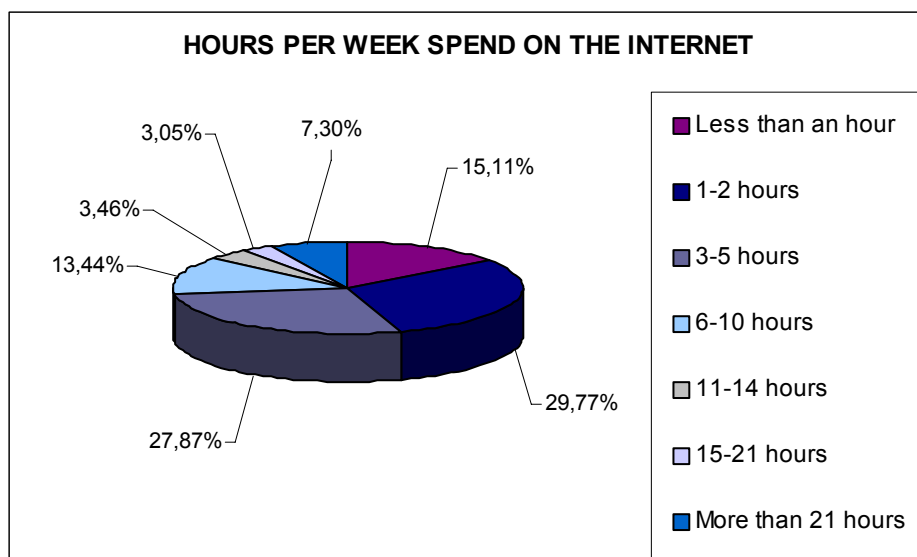- Access to internet in the first trimester of 2002

In other places for access to internet the internet cafes come first (69,0%) then follow neighbors', friends' or relatives' houses (47,0%) and public libraries (6,40%). The rest of the locations present no answers.

OTHER PLACES FOR ACCESSING THE INTERNET

PERCENTAGE %

- Public Library: 6,39
- Post Office: 0
- Public Office/Town Hall/Community Centre: 0
- Internet café: 69,15
- Neighbors,friends or relatives house: 46,81

A new element arising from the survey refers to telework. Teleworking occurs when paid workers carry 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. Teleworking consists a new way of work and occurs only in a percentage of 0,09% in the total population aged 16-74. Only 0,51% of persons having access to internet teleworks.

29,8% of persons accessing internet on average spend 1-2 hours per week on the internet at home or elsewhere, while 27,9% of them spends 3-5 hours per week. Relative pie, follows.

HOURS PER WEEK SPEND ON THE INTERNET

Legend:
- Less than an hour
- 1-2 hours
- 3-5 hours
- 6-10 hours
- 11-14 hours
- 15-21 hours
- More than 21 hours

Values shown: 3,05% · 7,30% · 15,11% · 3,46% · 13,44% · 27,87% · 29,77%

❑ **PURPOSES AND NATURE OF ACTIVITIES ON THE INTERNET**

One of the most important information arising from the survey concerns the personal purposes for which persons access the internet as well as the nature of activities done.

Hence, sending /receiving e-mails is in the first position with percentage 66,65 %, and then follow, in order, finding information about goods and services (65,86%), reading/ downloading online newspapers / magazines (51,92%) and using services related to training /education (41,88%). Financial services (e.g. internet banking, share purchasing) appear with 4,79%.

Of interest also is the communication citizens have with public authorities via their web-sites. 24,16% obtain information and 12,16% sends filled in forms, certificates, or makes tax return. Detailed table follows.

Main purposes for accessing the internet (for personal use solely) (1rst trimester of 2002)	%
Communication	
1.Sending/ receiving e-mails	66.65
2.Telephoning over the internet / videoconferencing	3.48
3.Other (use of chat sites, etc.)	19.97
Information search and on-line services	
4.Finding information about goods and services	65.86
5.Using services related to travel and accommodation	31.93
6.Using services related to training /education	41.88
7.Using health related services	10.15
8.Listening to radio / watching television	17.44
9.Playing / downloading games	27.37
10.Reading / downloading online newspapers /magazines	51.92
Purchase of goods and services, banking	
11.Financial services (e.g. internet banking, share purchasing)	4.79
12.Purchasing /ordering goods or services (excluding shares /financial services)	5.83
13.Selling goods and services (e.g. via auctions)	0.22
Interaction with public authorities	
14.Obtaining information from public authorities web sites	24.16
15.Downloading official forms	2.24
16.Sending filled in forms, certificates, tax return, etc.	12.16

Analytically, for certain of the above categories such as for sending /receiving e-mails and for using chat sites the distribution of ages is as following :

	Sending/receiving e-mails	Use of chat sites
16-24	33,9%	42,4%
25-34	32,0%	38,0%
35-44	20,5%	9,4%
45-54	8,4%	4,6%
55-64	4,4%	4,6%
65-74	0,8%	1,0%

According to our results 66,0% of persons sending /receiveing e-mails are in the age of 16-34, while the 80% of persons using chat sites lies in the same age range.

A large decrease (approx. 29,0%) is observed among persons using chat sites, and more specifically for ages 25 - 34 and 35 - 44. Also, it is worth noticing low percentages for both pre-mentioned categories for persons aged 55-74.

Following presented are the percentages for other categories of finding information for goods and services (65,9%), reading newspapers /magazines (51,9%), searching training /education activities (41,9%) and finding information for travel and accommodation services (31,9%), in respect to the users' age.

	Finding information for goods and services	Reading newspapers magazines	Searching training /education activities	Travel and accommodation services
16-24	34,1%	30,8%	40,6%	29,2%
25-34	29,8%	32,2%	32,4%	28,8%
35-44	21,9%	21,1%	16,3%	26,0%
45-54	9,9%	10,0%	5,8%	12,0%
55-64	3,6%	5,1%	3,4%	3,5%
65-74	0,7%	0,8%	1,5%	0,5%

Most of persons accessing the internet for the pre-mentioned (in the table) purposes age 16-24, except for reading newspapers /magazines. Searching information for training / education is the most common purpose for accessing internet for ages 16-24 and 25-34. Also, increased interest is observed for travel and accommodation services for ages 35-44 and 45-54. On the other hand, lack of interest in accessing internet and for any purpose is observed for ages 55-74, and mainly for reading / downloading newspapers /magazines.

As far as the use of financial services is concerned, that is internet banking, share purchasing, etc. (4,8%), the interaction with public authorities and more specifically obtaining information from public authorities' web sites (24,2%) and sending of filled in forms (12,2%), in respect to the user's age we note the following.

		Financial services	*Obtaining information from public authorities web sites*	*Sending filled in forms*
•	16-24	22,4%	34,1%	18,9%
•	25-34	33,2%	28,9%	42,3%
•	35-44	28,1%	24,2%	23,4%
•	45-54	11,8%	10,6%	7,2%
•	55-64	4,5%	2,2%	8,2%
•	65-74	-	-	-

Most of persons obtaining information from public authorities' web sites age 16-24 which seems reasonable as being part of their job searching, while most of those sending filled in forms, certificates and tax returns, as well as of those using financial services are persons aged 25-34.

What's interesting is the total absence of answers –in any category- for ages 65-74. Even for ages 55-64 answers (at low percentages) have been recorded only for males.

As far as activity status is concerned, _working persons_ –representing the 63,5% of all internet users- (employees, self-employed, family workers) they mostly access internet in order to find information about goods and services, they send /receive e-mails and read /download newspapers /magazines.
Less use is presented for selling goods and services (e.g. via auctions) and in downloading official forms.

Students representing the 27,0% of all internet users, mostly send/ receive e-mails, search for information about goods and services and also for training /education services. Less use is presented, again, for selling goods and services (e.g. via auctions) and in downloading official forms.

Lastly, _pensioners_, representing the 2,4% of internet users, mostly access in order to find information about goods and services, to read newspapers and magazines and to send /receive e-mails. No use at all has been recorded for sending filled in forms (e.g. tax returns) for telephoning over the internet and videoconferencing and for health related services.

Searching for information on health services is, for all persons accessing the internet, approximately 10,15%. Except for the pensioners –which seems odd- in all other activity categories the percentage is approx.10,15%.

❏   **INTERNET COMMERCE – ACTIVITIES AND BARRIERS**

On internet commerce according to the survey a percentage of 14,8% among persons having accessed the internet, has sometime in the past made orders for goods and/or services for non-work use over the internet. The rest 85,2% has never made any orders.
From those (14,8%) having sometimes in the past made orders 4,7% has made orders during the first trimester of 2002 and the rest 10% had made orders in the past and not during the first trimester mainly because there was no need for any order (73,7%).

ORDERS FOR GOODS AND SERVICES VIA INTERNET
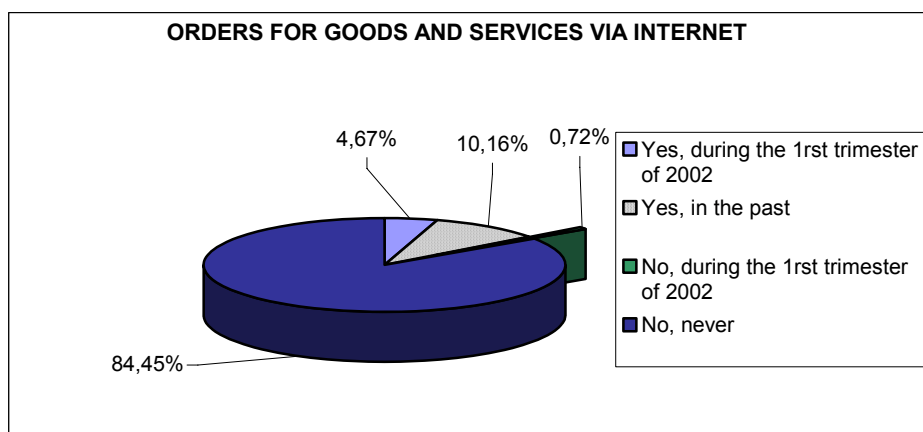
The following table presents main reasons for not having ever made any order for goods or services over the internet.

Main reasons for not having made orders over the internet

Have no need	52,5%
Prefer to shop in person, like to see product	48,2%
Security concerns/ worried about giving credit card details over the internet	26,8%
Privacy concerns/ worried about giving personal details over the internet	19,6%
Force of habit/ customer loyalty to shops or suppliers	14,5%
Trust concerns/ concerned about receiving or returning goods	4,8%
Problematic to receive ordered goods at home	4,1%
Other reasons	3,0%
Goods and services needed not available on the internet	2,1%
Too long delivery times	1,9%
Have complaints/ redress concerns, worried about difficulty for redress	1,3%
Too expensive	1,3%

As other reasons, have been recorded "person has access to internet only from place of work and hence is not permitted to make orders", "person has not yet familiarity with internet so as to proceed with orders and purchases", etc.

The orders of goods or services via the internet are made through the computer (of any type) (93,2%) and via internet activated mobile phone –WAP / GPRS- (6,8%).

**DEVICES FOR ACCESSING INTERNET**
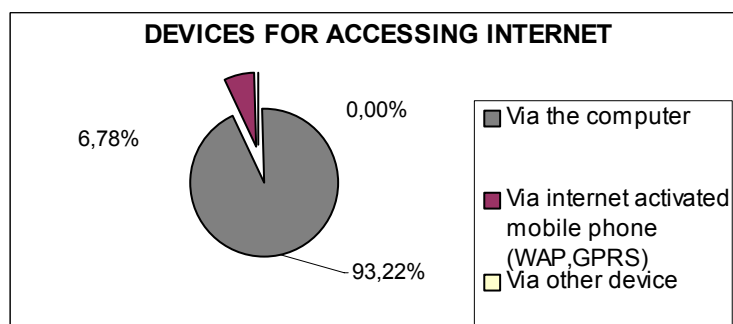
Orders are mainly for books/ magazines/ e-learning material (40,5%), films (videos, dvd etc.), music systems, cds (33,5%), and computer hardware (incl. accessories for upgrading PC eg. memory, hard disk, graphic cards etc.) (27,5%).

Detailed table on products and services ordered follows.

Products and Services	Estimated percentage of purchases
1. Food / Groceries	0.00%
2. Films (videos, dvd etc.), music systems, cd	33.46%
3. Books/ Magazines/ E-learning material	40.53%
4. Clothes, sports goods	6.19%
5. Computer software (incl. Video games)	11.45%
6. Computer hardware (incl. accessories for upgrading PC eg. memory, hard disk, graphic cards etc.)	27.54%
7. Electronic equipment (incl. cameras, megaphones etc.)	11.30%
8. Share purchases / Financial services /Insurance	2.67%
9. Travel and holiday accommodation	5.12%
10. Tickets for events (conferences, theater, etc.)	0.00%
11. Lotteries and betting	0.00%
12. Other. Please, specify_____	12.14%

As other goods were recorded car accessories, cosmetics, toys and jewels.
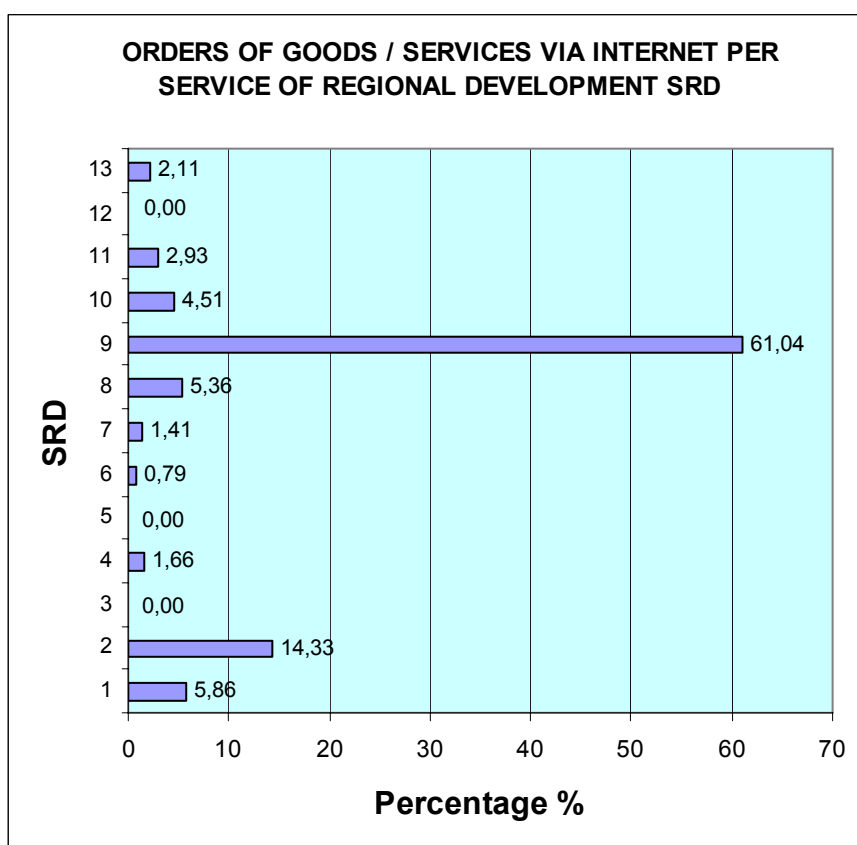
The larger amount of orders, for the first trimester of 2002, according to the above representation, are in the areas (Services for Regional Development) at which included are the cities of Athens and Thessaloniki. Also, areas of Western Macedonia (SRD 3), Thessalia (SRD 5) and the islands of South Aigaion (SRD 12) present zero orders.

Concerning any problems encountered when making purchases over the internet most answered that no problem was encountered (79,0%). For the rest 21% problems seem to be mainly the lack of security of payments (11,0%) and the speed of delivery being longer than indicated. As other problems were recorded the loss of goods ordered and problems faced with the customs.

USE OF COMPUTER – ACCESS TO INTERNET BY REGIONAL AREAS

The regional distribution of persons using computer and accessing the internet is represented in the graph following.

At first place is the Prefecture of Attiki with the 31,6% of its population making use of computer and 19,1% accessing the internet. Then follow with comparably large percentage the islands of South Aigaion (Cyclades and Dodecanisa) with 27,3% of their population making use of computer and 17,5% accessing the internet. Central Macedonia and the Ionian Islands come next with percentages 24,4% and 13,9% and 22,5% and 11,4%, respectively.

USE OF COMPUTER - ACCESS TO INTERNET BY SRD

SERVICE OF REGIONAL DEVELOPMENT
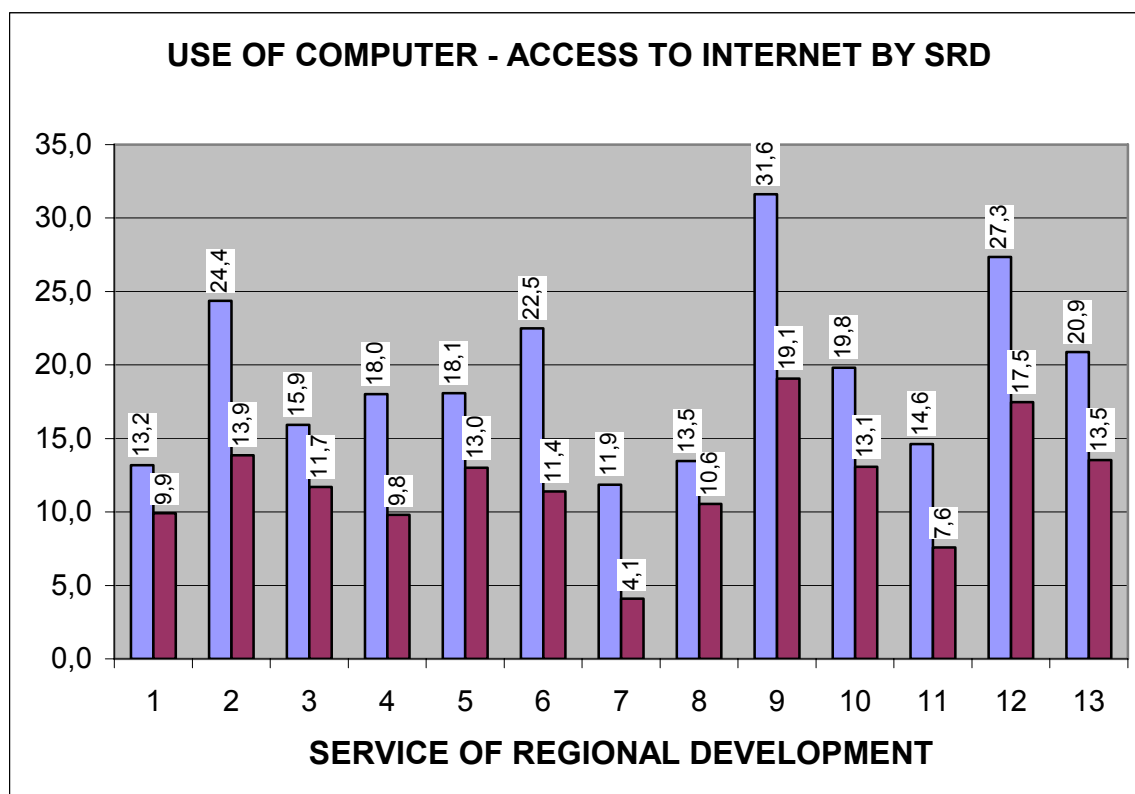
1st REGIONAL AREA: EAST MACEDONIA AND THRACE
2nd REGIONAL AREA: CENTRAL MACEDONIA
3rd REGIONAL AREA: WEST MACEDONIA
4th REGIONAL AREA : IPIROS
5th REGIONAL AREA : THESSALIA
6th REGIONAL AREA : IONIAN ISLANDS
7th REGIONAL AREA : WEST GREECE
8th REGIONAL AREA: REST STEREA ELLADA
9th REGIONAL AREA : ATTIKI
10th REGIONAL AREA : REST PELOPONISOS
11th REGIONAL AREA: NORTH AGAIO
12th REGIONAL AREA : SOUTH AGAIO
13th REGIONAL AREA : KRITI