

## INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) USAGE SURVEY IN HOUSEHOLDS AND BY INDIVIDUALS 2017

SUMMARY RESULTS

Nicosia, November, 2017

# INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) USAGE SURVEY IN HOUSEHOLDS AND BY INDIVIDUALS 2017

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#### PREFACE

This report presents the results of the survey ICT Usage in Households and by Individuals 2017. The aim of the annual survey is to collect data on the access of households to selected Information and Communication Technologies (ICT), on the use of computers and Internet, the reasons for using the Internet, the use of egovernment and e-Commerce and e-skills.

The survey, which is cofounded by the European Community, conforms to the regulation (EC) No. 808/2004 of the European Parliament and of the Council of 21 April 2004 concerning Community statistics on the information society. The objective of this Regulation is to establish a common framework for the systematic production of Community statistics on the information society.

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## A. SURVEY METHODOLOGY

The survey covers households with at least one member aged 16 - 74 (inclusive) and individuals aged 16 - 74 (inclusive).

The sampling frame used for the selection of the sample was the 2011 Population Census Frame, with reference date the 1st of October 2011. The units listed therein are households and individuals. Districts, municipalities, quarters, addresses, number of persons, telephone numbers are also included for each household. The 2011 Census frame was updated in September 2014, with the domestic consumers of electricity that were connected after Census, obtained from the Electricity Authority of Cyprus. In September 2016, the domestic consumers of electricity that were connected in the period from September 2014 to September 2016 obtained from the Electricity Authority of Cyprus were added to the Frame of 2014.

There is one-to-one correspondence between the domestic consumer of electricity and the statistical definition of households.

Simple random sampling is used for the selection of households in urban areas (one-stage sampling).

In rural areas, two-stage sampling is used. Villages are the primary sampling units, while households are the secondary sampling units. Neighbouring Villages with a small number of households are merged in order to create complexes with a minimum number of households. The sample of villages is selected with probability proportional to the size of the village (PPS). Then, a simple random sample of households is selected from each village.

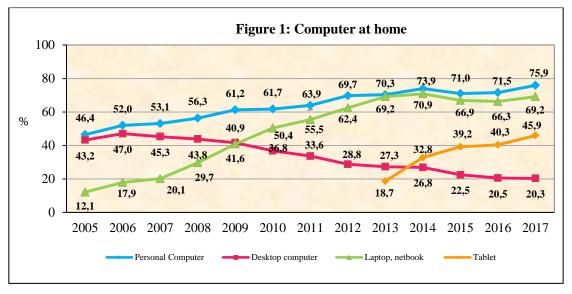
All individuals, aged 16-74, within each sampled household were included in the sample of persons.

## **B. MAIN FINDINGS**

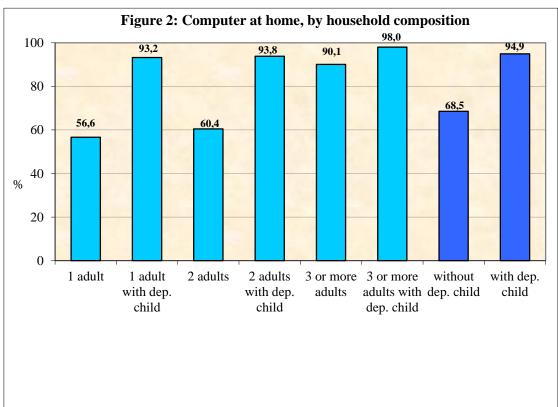
## **HOUSEHOLDS**

## Access to Information and Communication Technologies

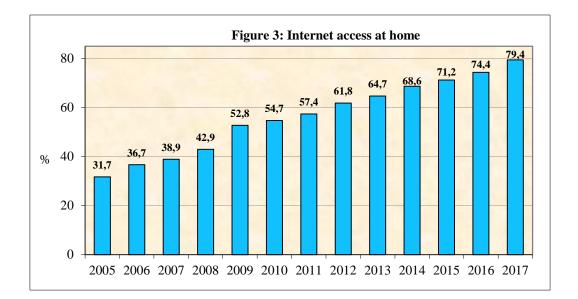
During 2017, 75,9% of the households in Cyprus had access to a personal computer: desktop, laptop/netbook or tablet computer (Figure 1).



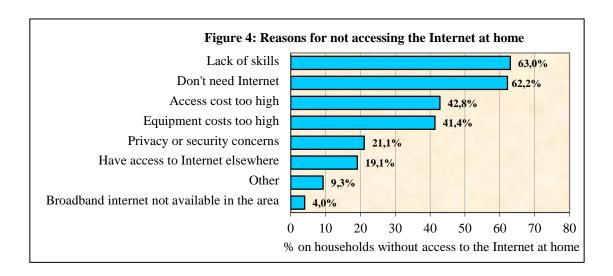
When looking at the access to a computer (desktop, laptop/netbook or tablet) at home with respect to household composition we see that there is a big difference between households with and without dependent children. Particularly, a computer is found in 94,9% of households with dependent children. In households with no dependent children the percentage is reduced to 68,5% (Figure 2).



Internet access by households continuous to rise. In the first quarter of 2017, the Internet was accessed by 8 out 10 households (79,4%) (Figure 3).



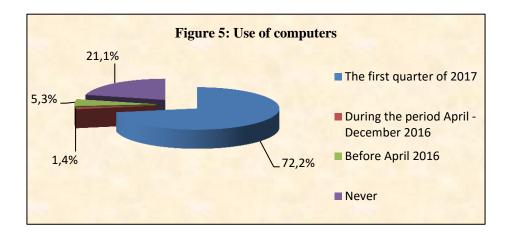
The main reason for not accessing the Internet at home in 2017 is the lack of skills (63% of total households that do not have access). The second reason is that people don't need it (62,2%). About 42,0% of the households stated that they do not have access to the Internet because access and equipment costs are too high (Figure 4).



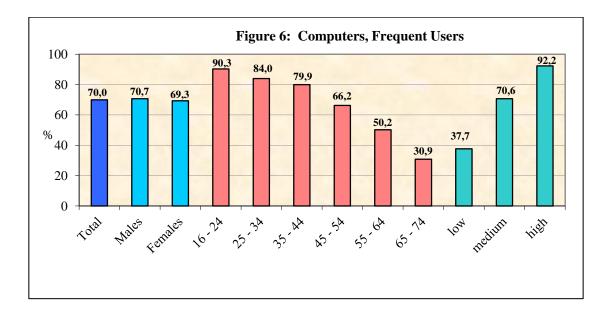
## **INDIVIDUALS**

### **Use of Computer**

Seven out of ten persons (72,2%) used a computer during the first quarter of 2017 (Figure 5).

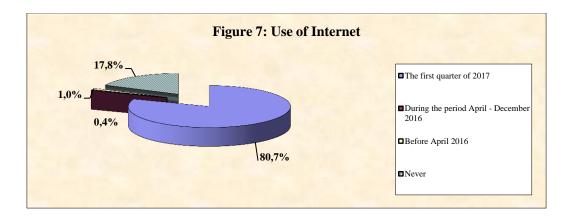


70% of all people that were using a computer during the first quarter of 2017 were frequent users, i.e. they used it at least once a week. 70,7% of men use a computer frequently, whereas the corresponding percentage for women is 69,3%. Age and education level are important factors on how often a person is using a computer. Younger and highly educated persons use computers more frequently. The percentage of frequent computer users decreases with age and increases with education level (Figure 6).



#### **Use of the Internet**

80,7% of individuals aged 16 - 74 accessed the Internet in the first quarter of 2017. 17,8% stated that they never used the Internet whereas, 1,0% used the Internet before April of 2016 (Figure 7).



As regards the frequency of Internet use, eight out of ten persons use the Internet at least once a week (Figure 8). The Internet use decreases with age. Starting from 98,2% for the 16 - 24 age group the Internet use gradually drops to 33,9% for the 65 - 74 age group.

Education is grouped into 3 main categories: low education level which includes less than primary education up to lower secondary education, medium educational level includes upper secondary education up to Post secondary non-tertiary (< 2 years) education and high educational level includes short- cycle tertiary (2-3 years) education up to University (PhD). The fact that the confidence intervals (shown on Figure 8) for the different education level categories of frequent Internet users are not overlapping proves that there is indeed a difference between education level categories. As expected, high educated persons use the Internet more frequently than persons with lower education. In fact, the percentage of high educated people that used regularly the internet is almost twice as much the percentage of low educated people.

Finally, the percentages of males and females frequent users are almost equal (79,8% and 79,2% respectively, Figure 8).

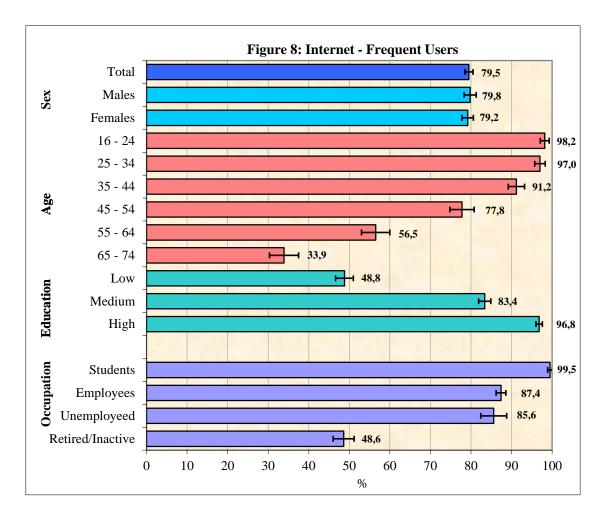
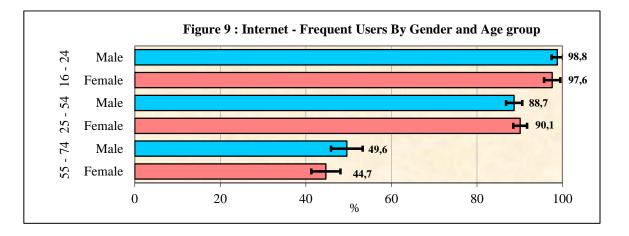
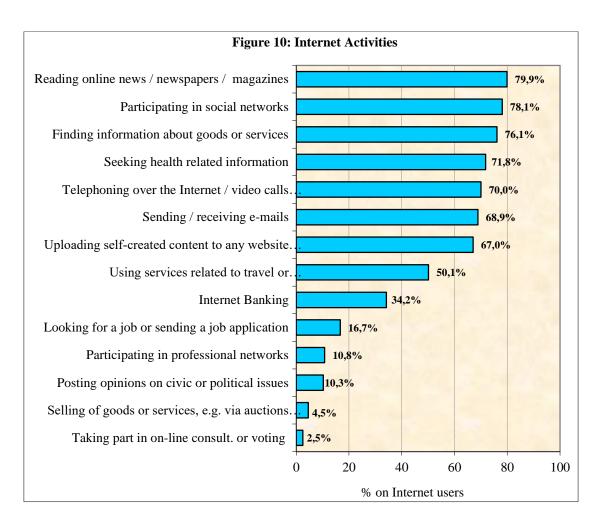


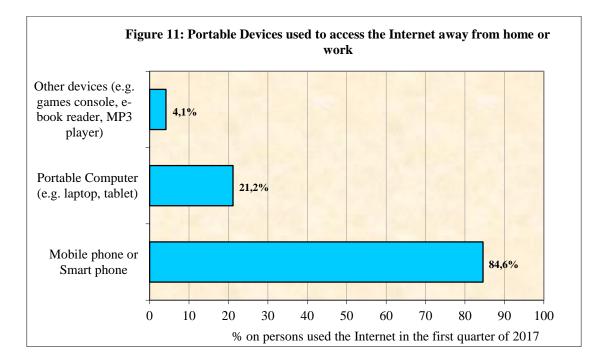
Figure 9 presents the use of Internet by gender and age group. For age groups 16 - 24 and 55 - 74, males use more frequently the internet than females, whereas for age group 25 - 54 women use the internet more frequently than men.



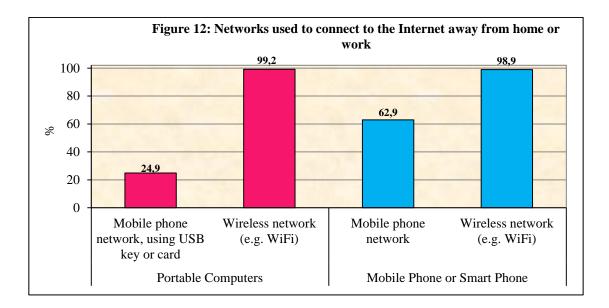
The most popular Internet activities are the following: reading online news/newspapers/magazines (79,9%), participating in social networks (78,1%) finding information about goods and services (76,1%), seeking health related information (71,8%) followed by telephoning over the internet and sending/receiving (70,0%) (Figure 10).



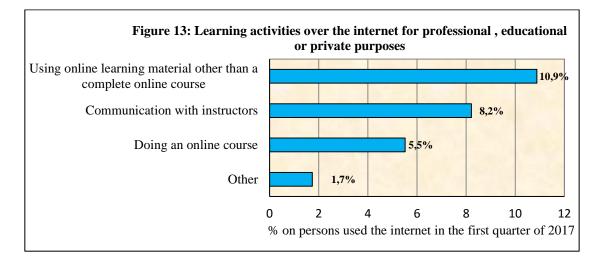
"Mobile Devices" received much attention because of providing better opportunities to use the Internet anywhere and anytime (ubiquitous connectivity) due to their small size and weight. "Mobile Devices" are classified in three broad categories: "Mobile Phones" including smart phones, "Portable computers" that include laptops and tablets and "Other Devices" such as games consoles, e-book readers and MP3 players. In Cyprus, 84,6% of the persons that used the Internet in the first quarter of 2017, used mobile phone or smart phone to access the Internet away from home or work while 21,2% used a laptop or tablet (Figure 11).



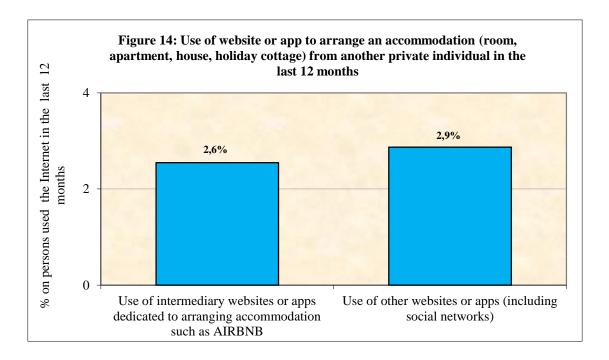
Wireless is the most common network that it is used to connect either with the portable computer or the mobile phone / smart phone to the Internet away from home or work. 62,9% of the persons that use mobile phones or smart phones use mobile phone network (Figure 12).

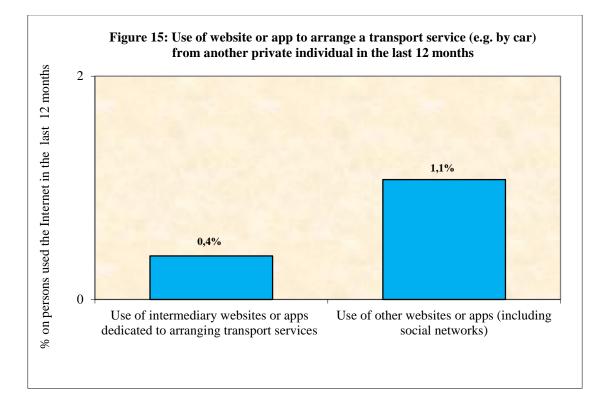


Learning activities over the internet refer to professional, educational or private purposes. As shown in Figure 13, among the persons that use the internet, 10,9% use online learning material other than a complete course, 8,2% communicated with instructors or students using educational websites, and 5,5% did an online course (Figure 13).



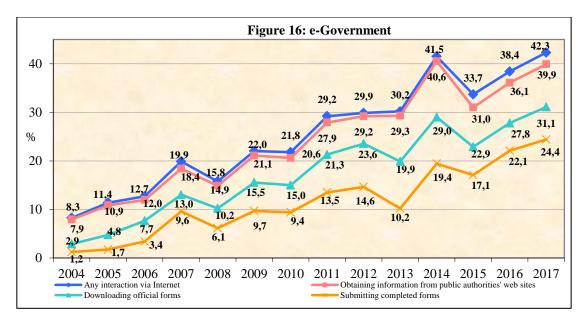
There are websites and apps that allow private individuals to arrange peer-to-peer transactions like accommodation and transport. As it can be seen from Figures 14 and 15 the rates of using these websites are very low for the case of Cyprus. Only 2,6% of the persons that used the internet in the last 12 months used an intermediary website or app to arrange accommodation such as AIRBNB and only 0,4% used an intermediary website or app to arrange transportation.



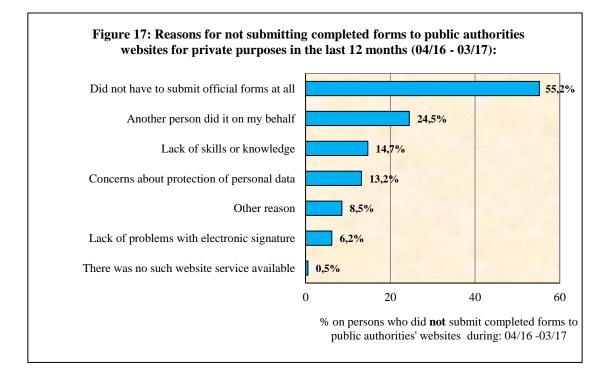


#### **Use of e-Government**

Compared to 2016, the percentage of persons who use the Internet for interaction with public authorities is increased. 4 out of 10 persons (39,9%) use the Internet for obtaining information from public authorities websites while 31,1% downloaded official forms and 24,4% have filled in forms (Figure 16).

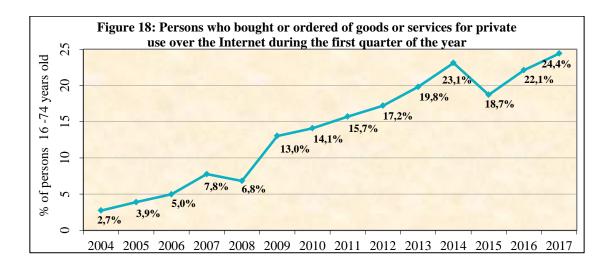


From those who did not submit completed forms to public authorities or public services' websites, 55,2% stated that they did not have to submit any official forms while 24,5% stated that another person did it on their behalf. It is worth noting that 14,7% declared that they did not have the necessary skills or knowledge to submit a form via a public website (Figure 17).

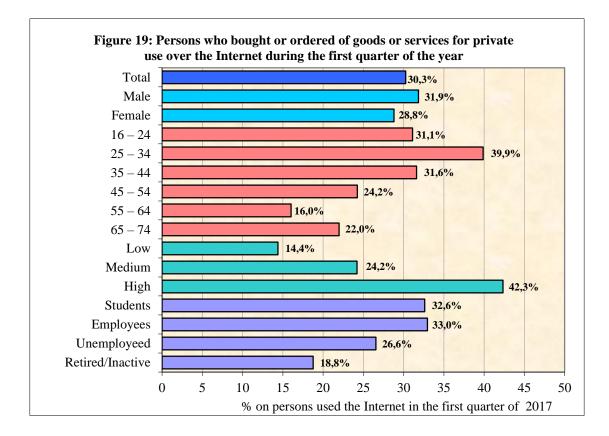


#### **Use of e-Commerce**

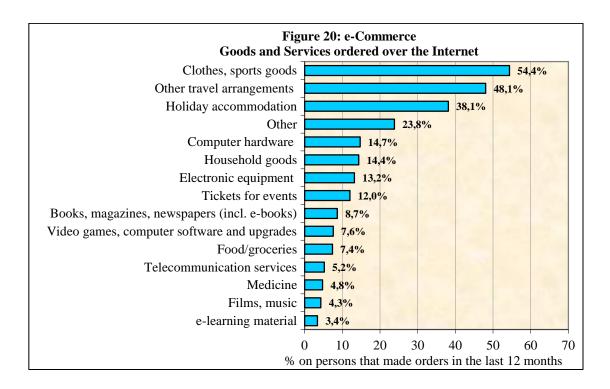
The percentage of individuals making online orders increased to 24,4% in 2017 compared to 22,1% in 2016 (Figure 18).



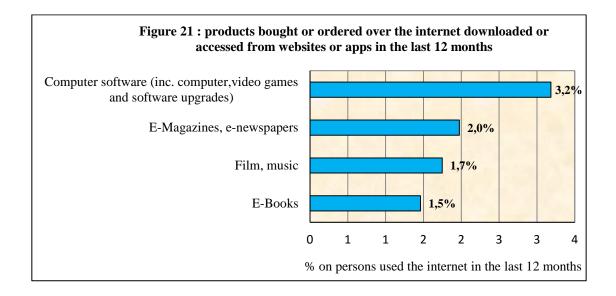
30,3% out of those who used the Internet in the first quarter of the year, bought or ordered goods or services for private use over the Internet. The gender, age, education level and occupation of a person seem to affect the e-commerce activity. Men buy or order goods or services over the Internet more than women while persons of age 25-34 years old are more actively involved in e-commerce. Regarding education level categories, high educated persons shop online more than persons with lower education. The occupation does not affect that much the e-commerce activity of a person but nevertheless employees and students place orders of goods and services for private use over the Internet more than unemployed person or retired/inactive person (Figure 19).



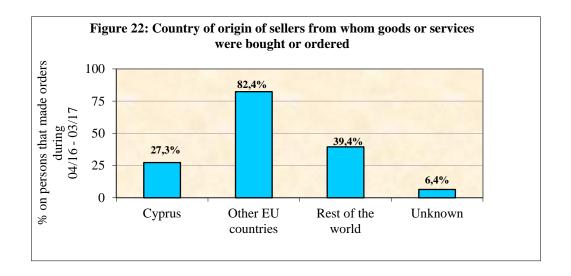
Five out of ten (54,4%) of the persons who ordered goods or services over the Internet in the last 12 months (April 2016 - March 2017), ordered *clothes or sports goods and arranged their travel* (48,1%) *by purchasing transport tickets and car hire etc.* Four out of ten (38,1%) *arranged their holiday accommodation on line* (Figure 20).



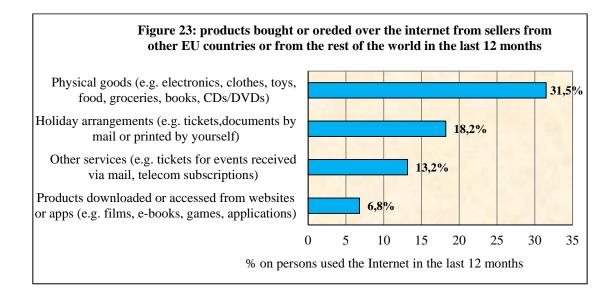
Among the persons that placed orders over the internet in the last 12 months only 3,2% downloaded or accessed their purchases on computer software from websites or apps. 2,0% downloaded or accessed e-magazines and e-newspapers and 1,7% downloaded or accessed films or music from websites or apps (Figure 21).



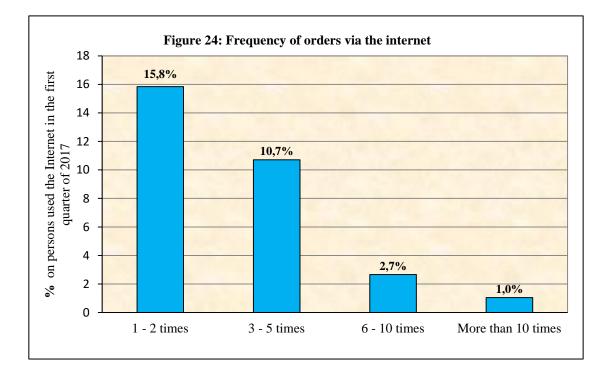
Among the people that bought or ordered goods or services for private use in the period April 2016 - March 2017 a significant percentage of 82,4% prefer sellers from other EU countries, 39,4% from the rest of the world and only 27,3% buy or order from sellers in Cyprus (Figure 22).



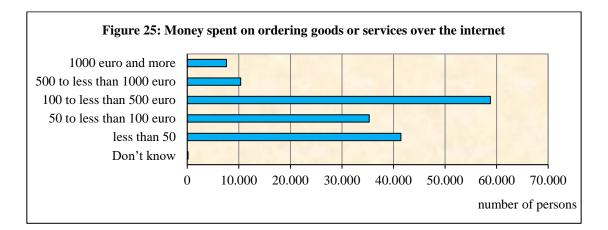
As presented in Figure 23, 31,5% of the persons that used the internet in the last 12 months bought physical goods over the internet from sellers from other EU countries or from the rest of the world in the last 12 months, 18,2% bought holiday arrangements and 13,2% other services. Only 6,8% downloaded or accessed products from websites or apps.



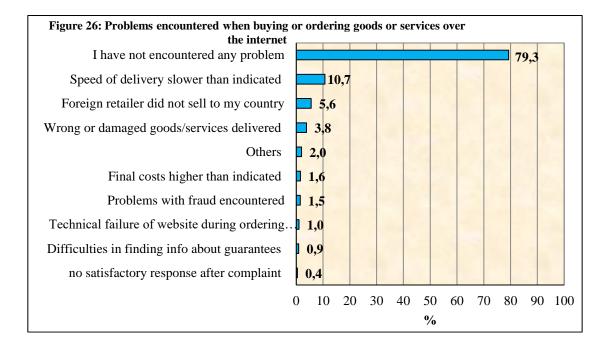
15,8% of persons that bought or ordered goods or services for private use ordered 1-2 times during the first quarter of 2017 and 10,7% ordered 3-5 times (Figure 24).



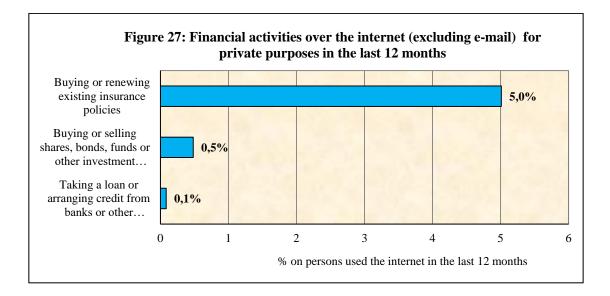
The following figure presents the distribution of the money spend on orders over the internet during the first quarter of 2017 by the total number of persons (Figure 25).



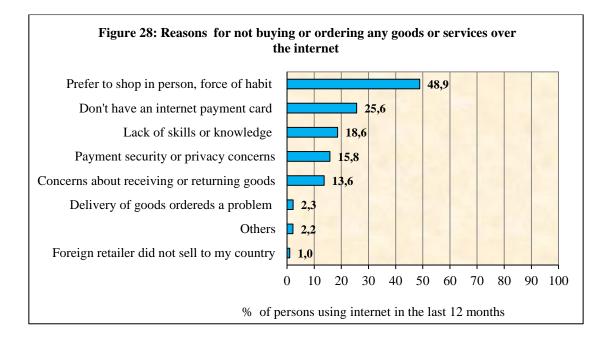
The main problem experienced while using the internet for buying or ordering goods or services was the speed of delivery i.e. 10,7% claim that the speed of delivery was slower than indicated. It is worth mentioning that 79,3% of persons buying over the internet did not encounter any problems (Figure 26).



Only 5% of persons that used the internet in the last 12 months bought or renewed an existing insurance policy over the internet and just 0,5% bought or sold shares, bonds, funds or other investment services (Figure 26).

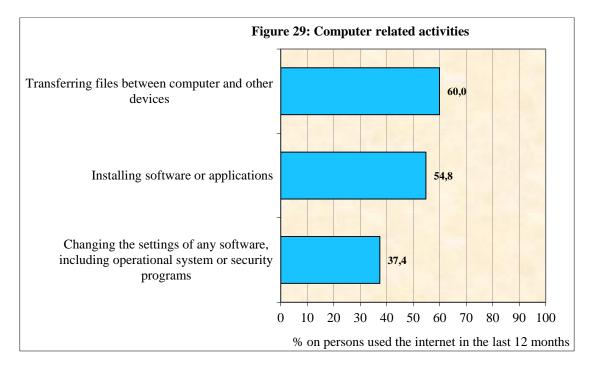


The main reason for not buying or ordering any goods or services via internet, is the preference to shop in person along with the force of habit (78,9%). 41,3% stated that they do not have a payment card allowing them to pay over the Internet and three out of ten persons (30,1%) did not make online purchases because they do not have the skills or knowledge (Figure 28).



### <u>e-Skills</u>

The majority of the persons that used internet, *transferred files between computer and* other devices (60,0%), 54,8% installed software or applications and 37,4% changed the settings of any software, including operational system or security programs (Figure 29).



The most common software activities among internet users were: copying or moving files or folders (61,3%) and using word processing software (59,2%). Using spreadsheet software and creating presentations or documents integrating text, pictures, tables or charts follow with 36,5% and 29,0% respectively (Figure 30).

