

#### STATISTICAL SERVICE OF CYPRUS

# INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) USAGE AND E-COMMERCE SURVEY IN ENTERPRISES 2010

## **SUMMARY RESULTS**

Nicosia, December 2010

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#### PREFACE

This report presents the results of the survey on ICT Usage and e-Commerce in Enterprises 2010. The aim of the annual survey is to collect data on ICT usage, on Internet usage and on electronic commerce in enterprises. These data are necessary for the implementation of policy programs of both the Government and the Private Sector.

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 enterprises with 10 or more employees in the following statistical codes of economic activities NACE Rev.2 (Detailed description in annex):

С	Manufacturing
D	Electricity, Gas, Steam and Air Conditioning Supply
E	Water Supply; Sewerage, Waste Management and Remediation Activities
F	Construction
G	Wholesale and Retail Trade. Repair of motor vehicles, motorcycles and personal and household goods
Н	Transport and Storage
Ι	Accommodation and Food Service Activities
J	Information and Communication
L	Real Estate Activities
М	Professional, Scientific and Technical Activities
Ν	Administrative and Support Service Activities
S	Other Service Activities

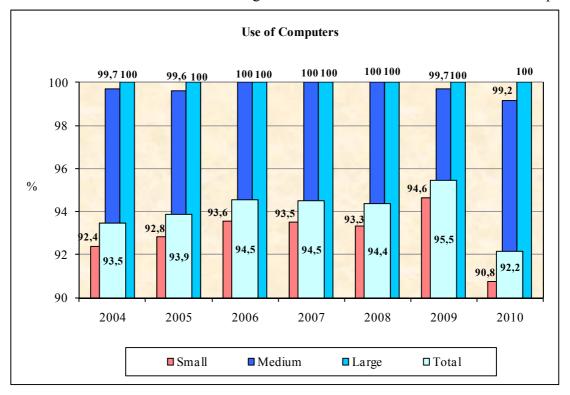
The sampling method used was stratified random sampling. Two variables were used for stratification, NACE group and size of the enterprise. There were 14 NACE groups and 3 size groups.

The 14 NACE groups (of economic activities) were the following: 10-18, 19-23, 24-25, 26-33, 35-39, 41-43, 45-47, 49-53, 55, 58-63, 68, 69-74, 77-82 and 95. The 3 size groups were: Small enterprises (10-49 employees), Medium enterprises (50-249 employees) and Large enterprises (250+ employees).

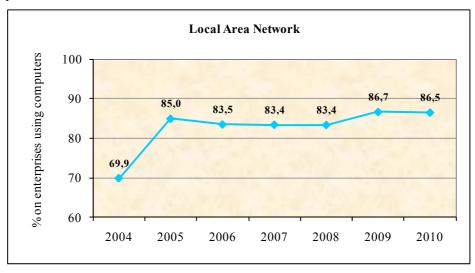
#### **B. MAIN FINDINGS**

#### **Use of Computers and Computer Networks**

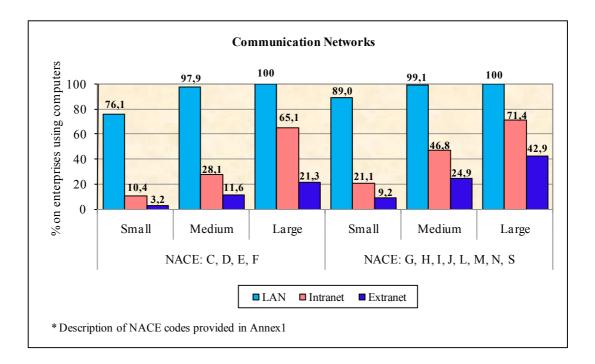
In January 2010, computers were used in almost all enterprises in Cyprus with 50 or more employees (i.e. medium and large enterprises). The percentage of small enterprises (10 - 49) employees) using computers decreased to 90,8% compared to 94,6% in 2009. This may be attributed to the fact that there has been a significant decrease of the number of small enterprises.



The majority of enterprises with 10 or more employees had local area networks (LAN) for communication between computers. More specifically, 86,5% of the enterprises using computers during January 2010 had a LAN. This percentage was stable during 2006 and 2008 and increased significantly in 2009 and remain stable in 2010.

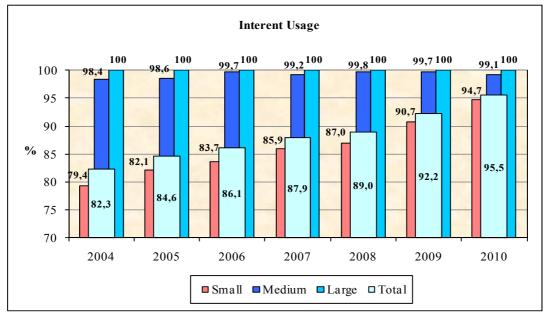


The probability of an enterprise having a local area network (LAN) was highly depended on the enterprise size. All large and almost all medium enterprises had a LAN. In small enterprises the percentage of enterprises having a LAN (% on enterprises using computers) was 76,1% for enterprises with NACE C, D, E and F (Manufacturing and Construction), and 89,0% for enterprises with NACE G, H, I, J, L, M, N and S (Trade, Transportation and Services). The percentages of having Intranet or Extranet were also highly correlated with the size and type of economic activity. They were increasing as size was increasing and as economic activity was changing from 'Manufacturing and Construction' to 'Trade, Transportation and Services'.

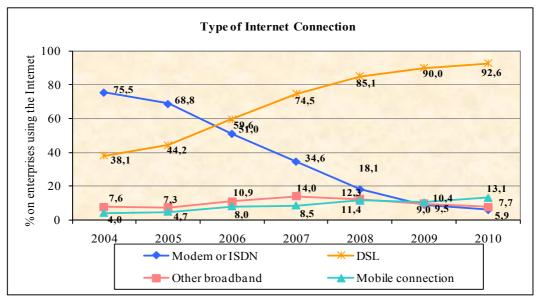


#### Access and Use of the Internet

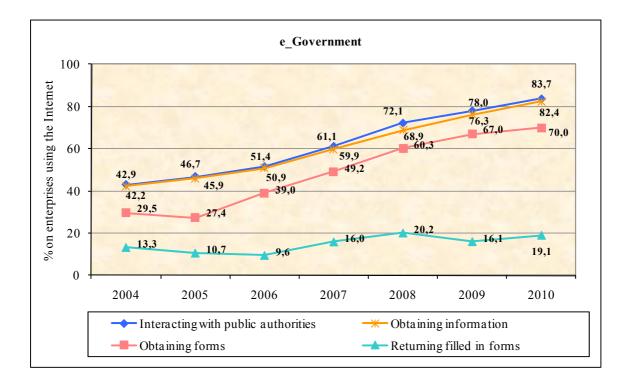
Unlike computer usage, that remained stable over the last years, Internet usage in enterprises was steadily increasing. 95,5% of enterprises (employing 10 or more persons) had access to the Internet in 2010. The same percentage was 82,3% in 2004. The Internet was used in all large and almost all medium enterprises. Internet usage in small enterprises kept increasing from 2004 to go over 94% in 2010.



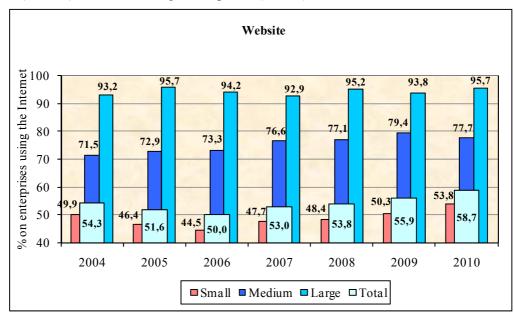
In the last four years there was a significant increase in broadband connections to the Internet. The modem used to be the most popular type of access to the Internet by enterprises in 2004. Over the years the use of a modem to connect to the Internet was decreasing, giving rise to broadband connections, and thus making DSL the most popular type of Internet access from 2006 onwards. In 2010, 92,6% of the enterprises with access to the Internet had a DSL connection.



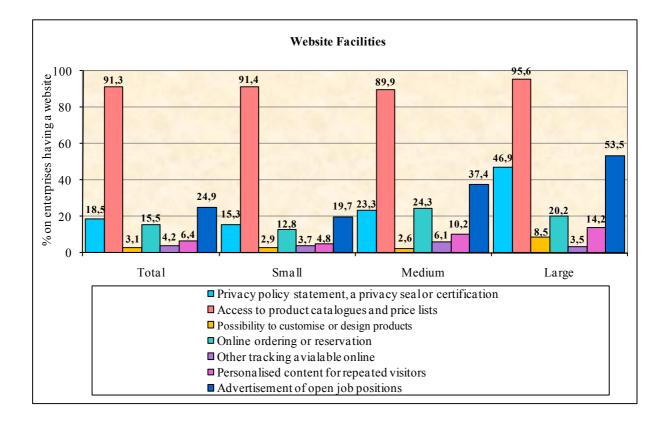
Enterprises use the Internet more and more to interact with public authorities. They can obtain information, forms, or return filled in forms via the Internet. 83,7% of the enterprises (employing 10 or more persons) that had access to the Internet in 2010, used the Internet to interact with public authorities during the previous year. Most of these enterprises used the Internet for obtaining information from public authorities' websites (82,4%).



More than half of the enterprises that used computers connected to the Internet, in 2010, also had a website (58, 7%). Almost all large enterprises (95,7%) had a website.

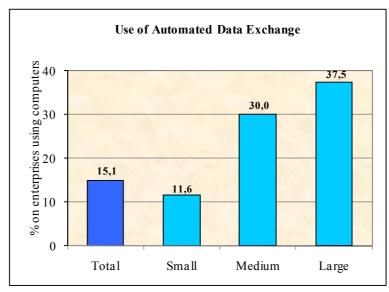


Among the facilities provided by enterprises through their website, the most predominant was the access to product catalogues and price lists (provided by 91,3% of enterprises having a website). 15,5% of the enterprises that had a website, provided the possibility of online ordering or reservation to their customers, while only 6,4% the possibility of personalized content for repeated visitors. 18,5% of the enterprises that had a website, had a privacy policy statement, a privacy seal or certification. This percentage is much higher for large enterprises (46,9% of the enterprises that had a website). Advertisement of open job positions on a website was more common in large enterprises (53,5%).

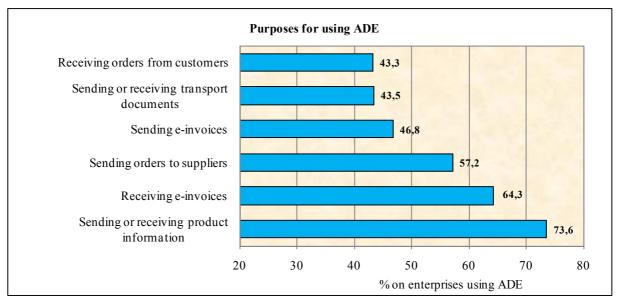


#### Automated Data Exchange

Automated Data Exchange (ADE) between an enterprise and other ICT systems outside the enterprise is the exchange of messages via the internet or other computer networks in an agreed format which allows its automatic processing without the individual message being manually typed. In January 2010, 15,1% of enterprises that had access to computers were using such a data exchange.

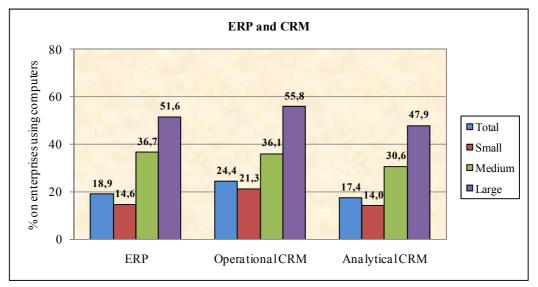


Most of the enterprises using ADE were exchanging information on products via ADE (73,6%).



#### Automatic share of information within the enterprise

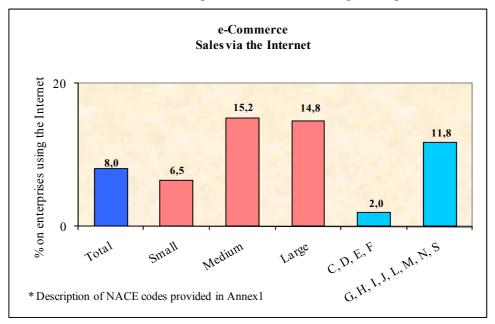
An Enterprise Resource Planning (ERP) software package is a set of applications that integrate information and processes across the several business functions of the enterprise. 18,9% of enterprises that used computers said that they had an ERP software package to share information on sales and purchases with other internal functional areas of the enterprise, during January 2010. ERP software package is most common in large enterprises that used computers, with percentage 51,6%.



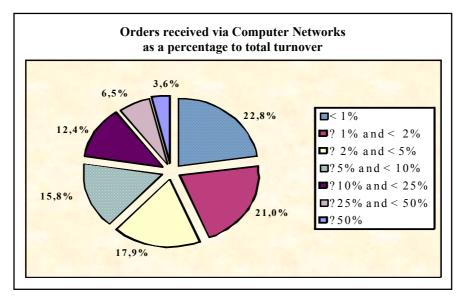
Among enterprises using computers 24,4 % had Operational CRM (Customer Relationship Management) software application for managing information about clients, either to capture, store and make available to other business functions the information about clients, and 17,4% had Analytical CRM to make analysis of the information about clients for marketing purposes. Both Operational and Analytical CRM are most common in large enterprises (55,8% and 47,9% respectively).

#### e-Commerce

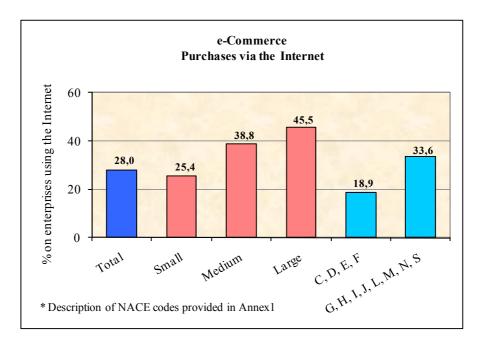
E-Commerce was not very popular among enterprises in Cyprus. Only 8,0% of enterprises using computers had received orders via computer networks (excluding manually typed e-mails), during 2009. Enterprises receiving online orders in Cyprus seemed to be mostly the ones that belong in NACE Rev.2 group G, H, I, J, L, M, N, S with percentage 11,8% which was much higher than in other economic activity (C, D, E, F: 2%). It is worth mentioning that medium enterprises received more orders via computer networks than large enterprises.



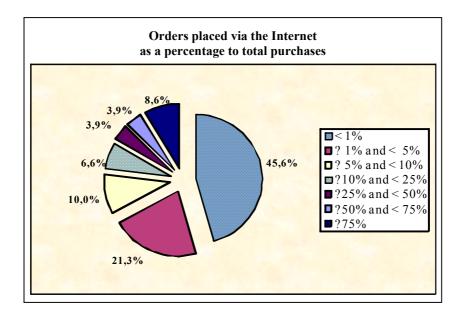
In relation to the total sales (in monetary terms, excluding VAT) sales via computer networks represented only a small percentage in many of the enterprises. Only in 3,6% of the enterprises that received electronic orders, the value of the turnover resulted from those orders represented more than 50% of their total turnover and in 61,7% of the enterprises that received electronics orders, the value of the turnover resulted from those orders represented less than 5% of their total turnover.



Only 28,0% of enterprises with 10 or more employees using computers made orders of products or services via computer networks during 2009. In large enterprises the percentage of ordering via computer networks was 45,5%.

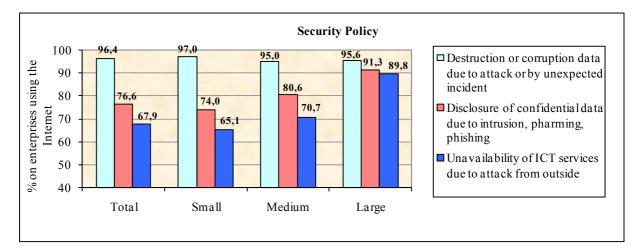


As with sales via computer networks, purchases via computer networks (in monetary terms, excluding VAT) represented only a small percentage in most of the enterprises. In the majority of enterprises that made electronic orders (66,9%) these orders represented less than 5% of the total value of orders of the enterprise. However, there were 16,4% of enterprises for which their online orders value was more than 25% of their total value of orders.

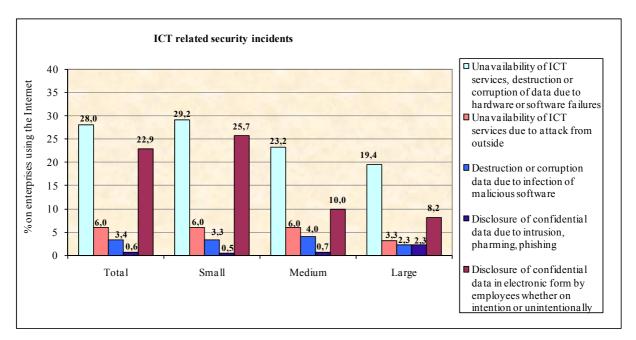


#### **ICT Security**

ICT security means measures, controls and procedures applied on ICT systems in order to ensure integrity, authenticity, availability and confidentiality and data and systems. 40,2% of enterprises using the Internet have a formally defined ICT security policy with a plan of regular review. The most common risk addressed in the ICT security policy was destruction or corruption of data, due to attack or by unexpected incident (96,4%). Almost all large enterprises that have a formally defined ICT security policy with a plan of regular review include in the security policy all the three risks.



The majority of the enterprises that faced ICT related security incidents and affected their ICT systems experienced unavailability of ICT services, destruction or corruption of data due to hardware or software failures (28,0%). The second most common incident was disclosure of confidential data in electronic form by employees whether on intention or unintentionally.



Annex Description of nace codes included in the survey NACE Rev.2

- C MANUFACTURING
- C10 MANUFACTURE OF FOOD PRODUCTS
- C11 MANUFACTURE OF BEVERAGES
- C12 MANUFACTURE OF TOBACCO PRODUCTS
- C13 MANUFACTURE OF TEXTILES
- C14 MANUFACTURE OF WEARING APPAREL
- C15 MANUFACTURE OF LEATHER AND RELATED PRODUCTS
- C16 MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK, EXCEPT FURNITURE; MANUFACTURE OF ARTICLES OF STRAW AND PLAITING MATERIALS
- C17 MANUFACTURE OF PAPER AND PAPER PRODUCTS
- C18 PRINTING AND REPRODUCTION OF RECORDED MEDIA
- C19 MANUFACTURE OF COKE AND REFINED PETROLEUM PRODUCTS
- C20 MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS
- C21 MANUFACTURE OF BASIC PHARMACEUTICAL PRODUCTS AND PHARMACEUTICAL PREPARATIONS
- C22 MANUFACTURE OF RUBBER AND PLASTIC PRODUCTS
- C23 MANUFACTURE OF OTHER NON- METALLIC MINERAL PRODUCTS
- C24 MANUFACTURE OF BASIC METALS
- C25 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT
- C26 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS
- C27 MANUFACTURE OF ELECTRICAL EQUIPMENT
- C28 MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C.
- C29 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS
- C30 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT
- C31 MANUFACTURE OF FURNITURE
- C32 OTHER MANUFACTURING
- C33 REPAIR AND INSTALLATION OF MACHINERY AND EQUIPMENT

#### D ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY

## E WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDATION ACTIVITIES

- E36 WATER COLLECTION, TREATMENT AND SUPPLY
- E37 SEWERAGE
- E38 WASTE COLLECTION, TREATMENT AND DISPOSAL ACTIVITIES; MATERIALS RECOVERY
- E39 REMEDATION ACTIVITIES AND OTHER WASTE MANAGEMENT SERVICES
- F CONSTRUCTION
- F41 CONSTRUCTION OF BUILDINGS
- F42 CIVIL ENGINEERING
- F43 SPECIALIZED CONSTRUCTION ACTIVITIES
- G WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES

- G45 WHOLESALE AND RETAIL TRADE AND REPAIR OF MOTOR VEHICLES AND MOTORCYCLES
- G46 WHOLESALE TRADE, EXCEPT OF MOTOR VEHICLES AND MOTORCYCLES
- G47 RETAIL TRADE, EXCEPT OF MOTOR VEHICLES AND MOTORCYCLES

#### H TRANSPORT, STORAGE AND COMMUNICATION

- H49 LAND TRANSPORT AND TRANSPORT VIA PIPELINES
- H50 WATER TRANSPORT
- H51 AIR TRANSPORT
- H52 WAREHOUSING AND SUPPORT ACTIVITIES FOR TRANSPORTATION
- H53 POSTAL AND COURIER ACTIVITIES

#### I ACCOMODATION AND FOOD SERVICE ACTIVITIES

- I55 ACCOMODATION
- I56 FOOD AND BEVERAGE SERVICE ACTIVITIES

#### J INFORMATION AND COMMUNICATION

- J58 PUBLISHING ACTIVITIES
- J59 MOTION PICTURE, VIDEO AND TELEVISION PROGRAMME PRODUCTION, SOUND RECORDING AND MUSIC PUBLISHING
- J60 PROGRAMMING AND BROADCASTING ACTIVITIES
- J61 TELECOMMUNICATIONS
- J62 COMPUTER PROGRAMMING, CONSULTANCY AND RELATED ACTIVITIES
- J63 INFORMATION SERVICE ACTIVITIES

#### L REAL ESTATE ACTIVITIES

#### M PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES

- M69 LEGAL AND ACCOUNTING ACTIVITIES
- M70 ACTIVITIES OF HEAD OFFICES; MANAGEMENT CONSULTANCY ACTIVITIES
- M71 ARCHITECTURAL AND ENGINEERING ACTIVITIES; TECHNICAL TESTING AND ANALYSIS
- M72 SCIENTIFIC RESEARCH AND DEVELOPMENT
- M73 ADVERTISING AND MARKET RESEARCH
- M74 OTHER PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES

#### N ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES

- N77 RENTAL AND LEASING ACTIVITIES
- N78 EMPLOYMENT ACTIVITIES
- N79 TRAVEL AGENCY, TOUR OPERATOR RESERVATION SERVICE AND RELATED ACTIVITIES
- N80 SECURITY AND INVESTIGATION ACTIVITIES
- N81 SERVICES TO BUILDINGS AND LANDSCAPE ACTIVITIES
- N82 OFFICE ADMINISTRATIVE, OFFICE SUPPORT AND OTHER BUSINESS SUPPORT ACTIVITIES

#### **S OTHER SERVICE ACTIVITIES**

ICT10\_ENT CY-Summary Results

#### S951 REPAIR OF COMPUTERS AND COMMUNICATION EQUIPMENTS