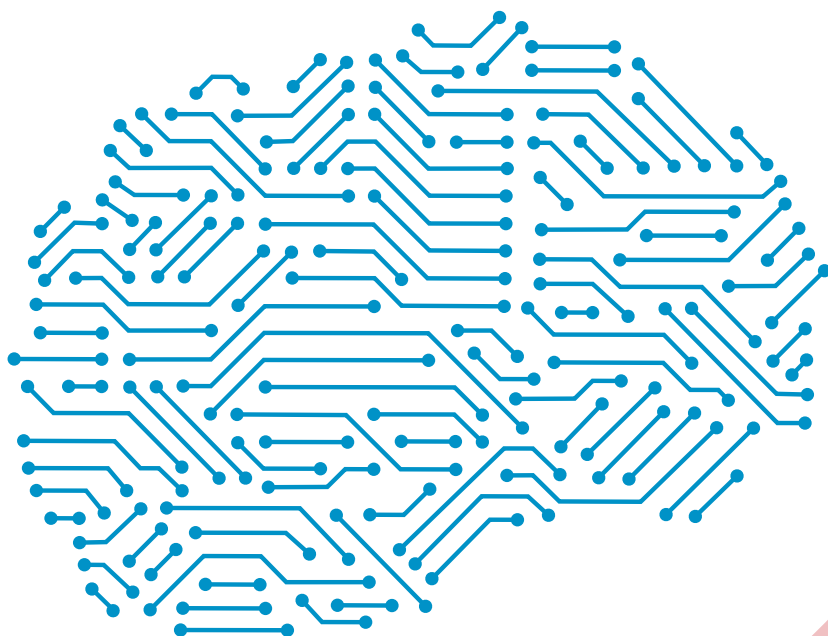


INFORMATION AND COMMUNICATIONS TECHNOLOGY SECTOR

in the Republic of Macedonia



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22	Membership in International Organizations

Invest in Macedonia



Fastest growing
ICT market
in the Adriatic region



Skilled and
cost effective
workforce



Excellent
language skills



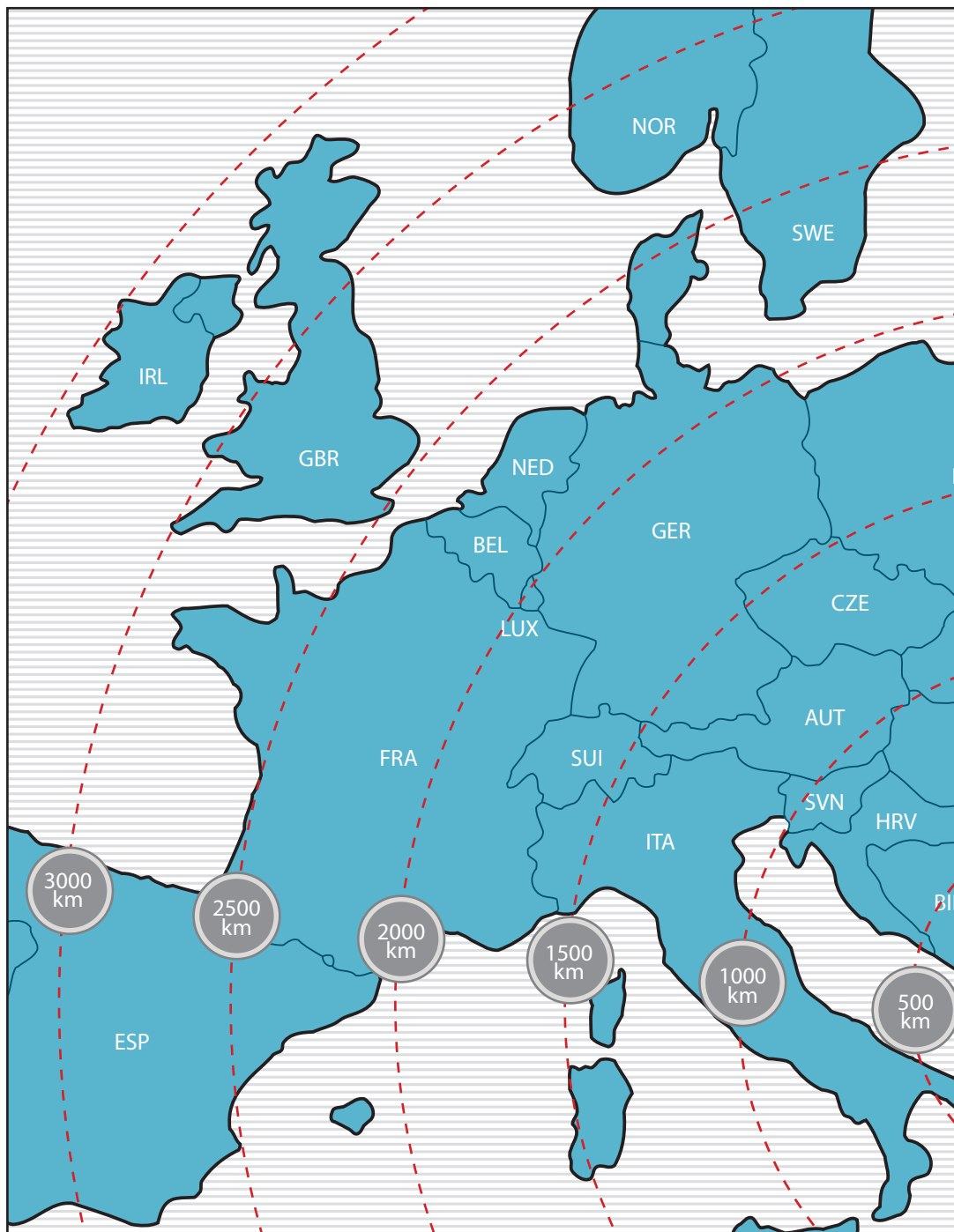
Sophisticated
telecommunications
infrastructure

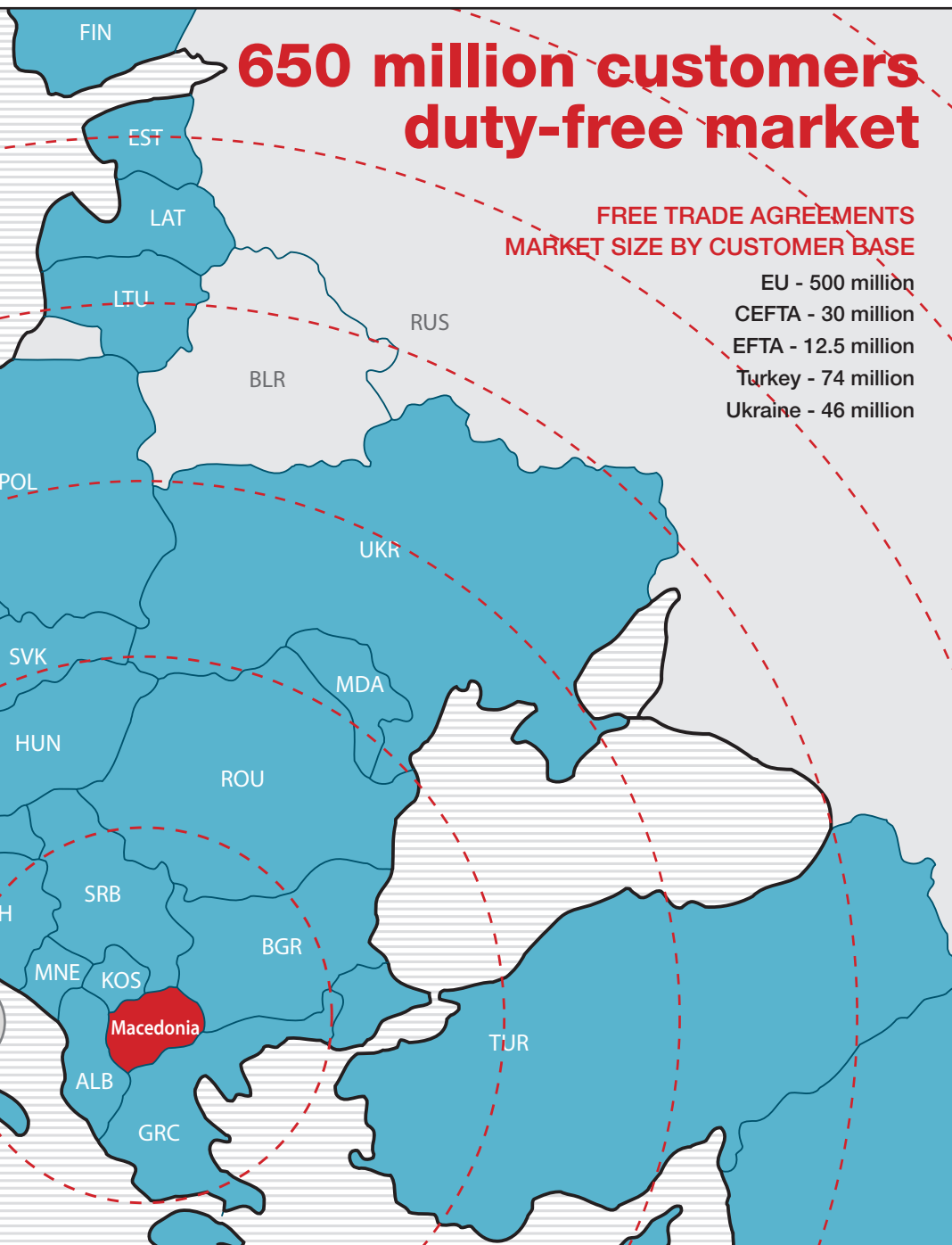


Low corporate
taxes



Government
highly supportive
of foreign direct
investments



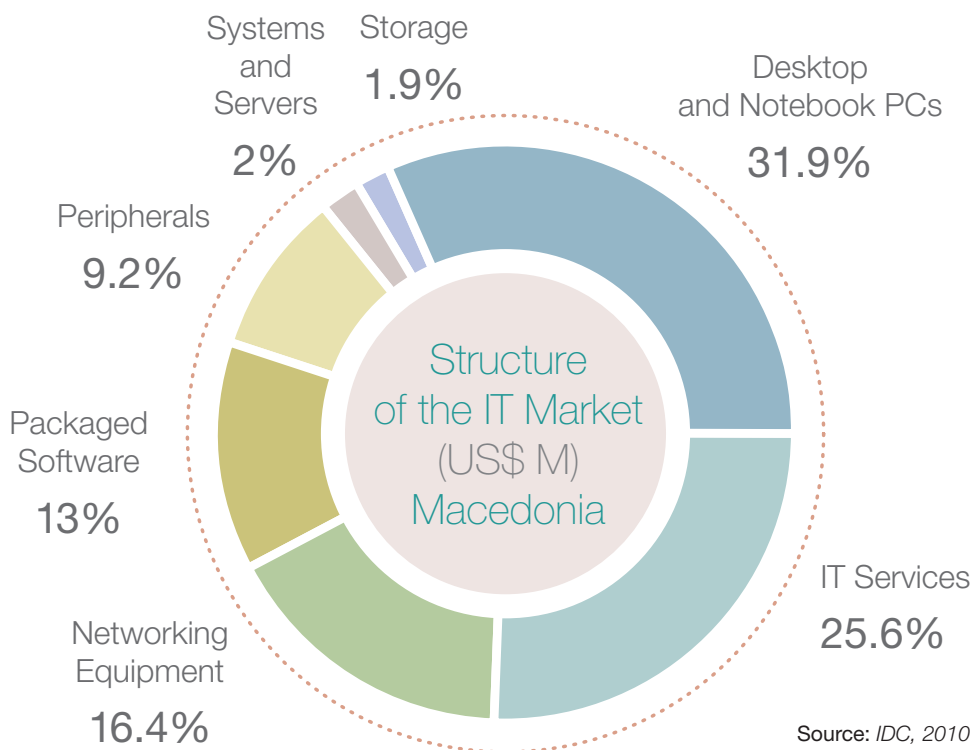


MACEDONIAN ICT MARKET: FASTEST GROWTH IN THE ADRIATIC REGION

STRUCTURE OF THE IT MARKET IN MACEDONIA

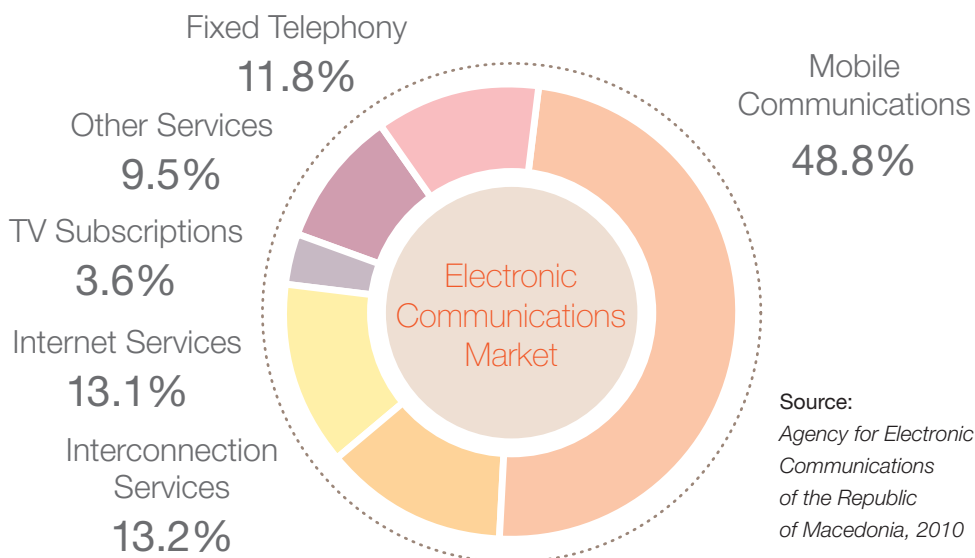
The Macedonian Information Technology market has marked another significant growth in 2009 of 7.7%, reaching \$164.5 million. Over the five-year forecast period, the country's IT market is expected to expand at a compound annual growth rate (CAGR) of 5.2%, and reach \$212 million in 2014. *Hardware* is the largest and most dynamic segment of the Macedonian IT market, with a striking yearly growth of 84.7%, taking up nearly 62% of the total IT market. *IT services* is the second largest segment, comprising 25.6% of the total IT expenditure, with a 15.8% rise in 2009, whereas *packaged software* is in third place comprising 13% of the total market, with an 8.2% yearly growth rate.

This growth is spurred by large investments by the government and telecommunications companies in IT, continued spending in the financial sector, a decrease in the price of IT equipment, and a decrease in VAT for the equipment.



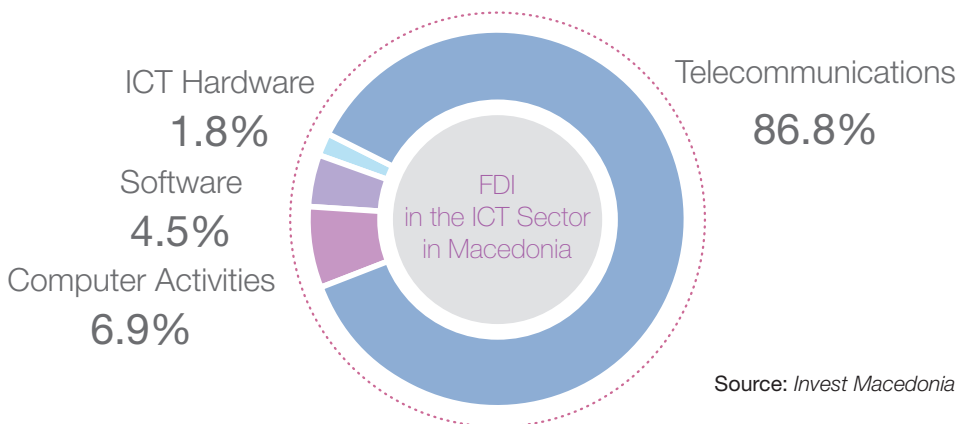
STRUCTURE OF THE ELECTRONIC COMMUNICATIONS MARKET IN MACEDONIA

According to the data from the Agency for Electronic Communications of the Republic of Macedonia, in 2010 the value of the electronic communications market reached almost €400 million, with the largest segment, 49%, comprised of mobile communications.



FDI IN THE ICT SECTOR IN MACEDONIA, 2006-2011

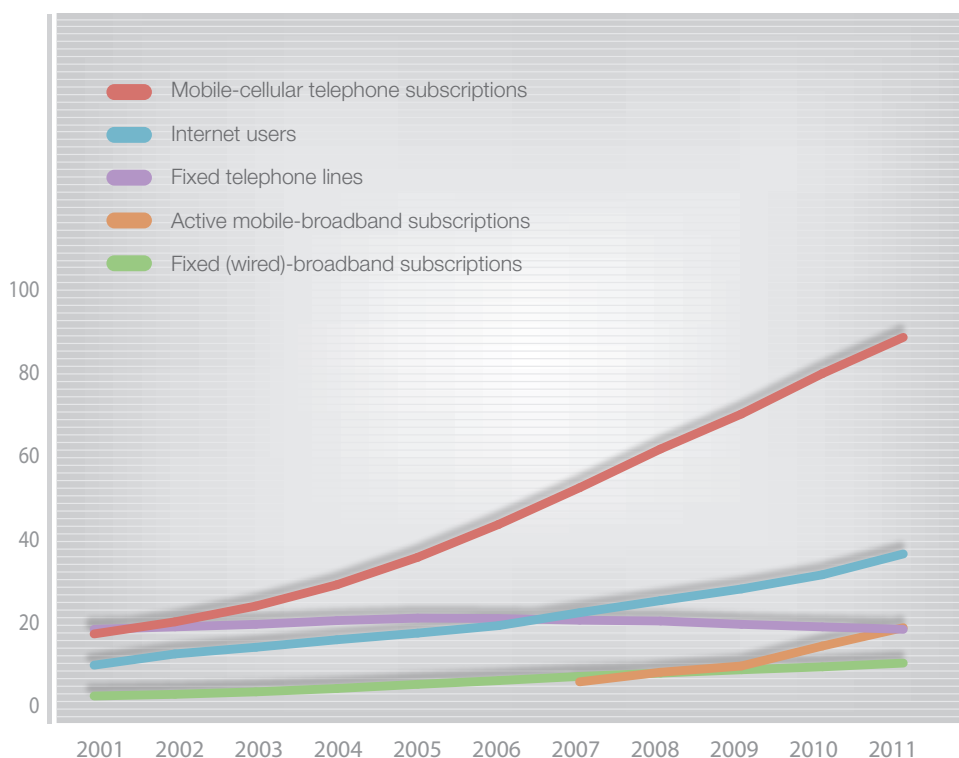
In the past five years the biggest foreign direct investments in the ICT sector in Macedonia were in the telecommunications sector, amounting to €174 million or 87%.



ICT TECHNOLOGY PENETRATION

Fixed telephony has become nearly extinct with the rise in popularity of mobile cellular telephones. According to the International Telecommunication Union, by the end of 2011, mobile cellular subscriptions exceeded fixed telephone line subscriptions by over four times. Fixed telephony has experienced nearly no growth in the last decade, in stark contrast to the mobile sector.

Global ICT Developments, 2001-2011*



* Estimate.

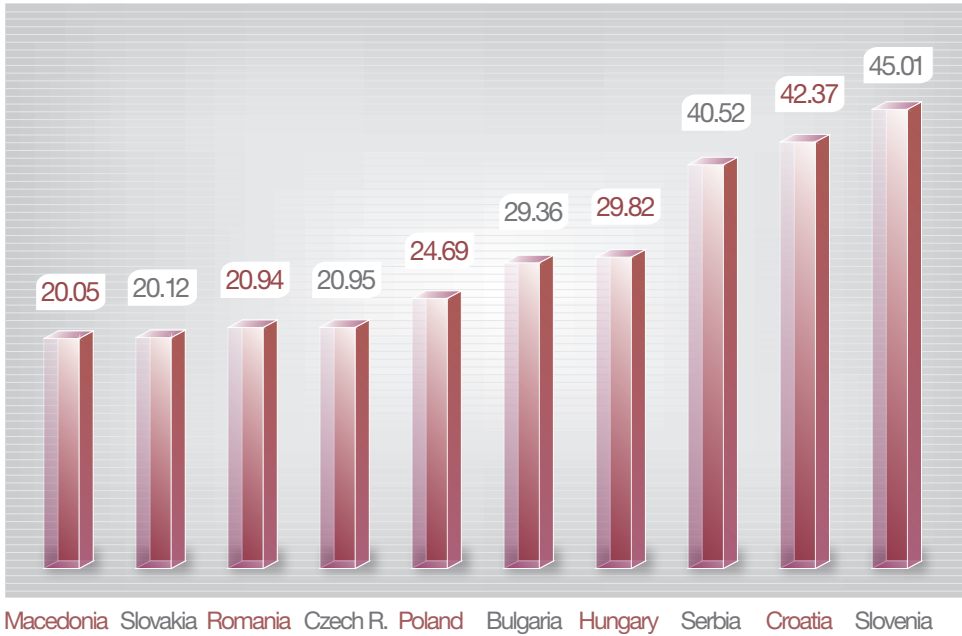
Source:

ITU World Telecommunication / ICT Indicators database

Following global trends, mobile cellular subscriptions in Macedonia have been increasing over the last three years (more than 20%), as opposed to fixed telephony subscriptions. Furthermore, internet and broadband internet subscribers have increased significantly, up 18.23%, in 2010. In addition, the number of subscribers to TV services (Cable, IPTV, DVB-T and Satellite) increased 19.11% in 2010.

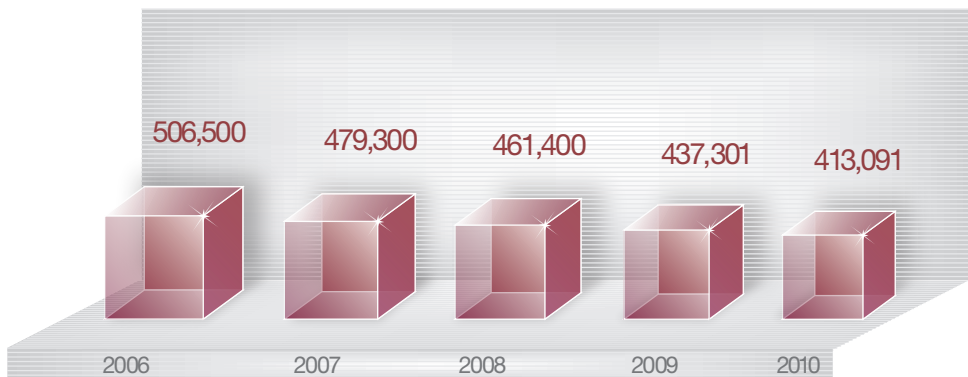
FIXED TELEPHONY

a. Fixed Telephone Lines per 100 Inhabitants (2010)



Source: *International Telecommunication Union, 2010*

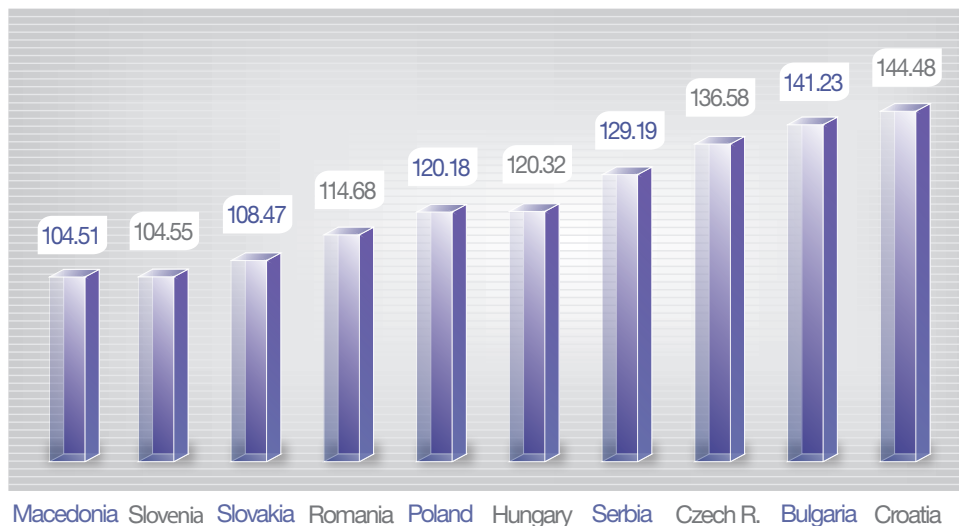
b. Number of Fixed Telephone Lines in Macedonia by Year



Source: *Agency for Electronic Communications of the Republic of Macedonia*

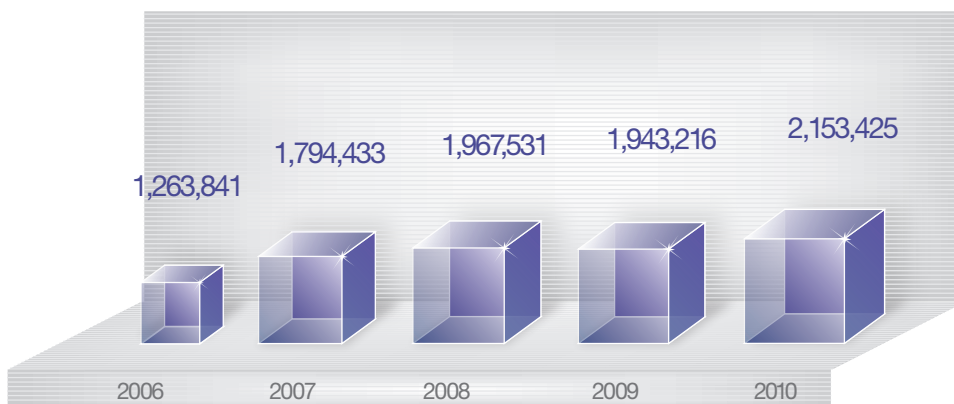
MOBILE CELLULAR TELEPHONY

a. Mobile Cellular Subscribers per 100 Inhabitants (2010)



Source: *International Telecommunication Union, 2010*

b. Number of Mobile Cellular Subscribers in Macedonia by Year



Source: *Agency for Electronic Communications of the Republic of Macedonia*

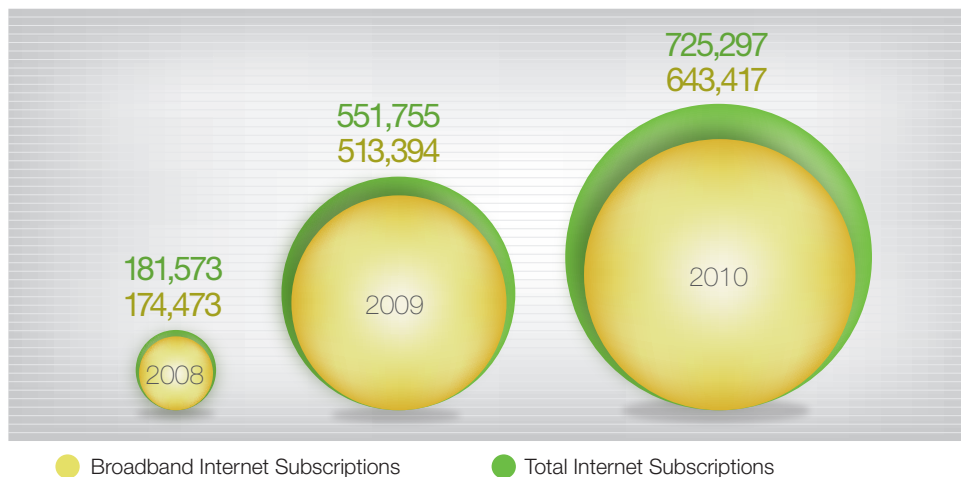
INTERNET

a. Internet Users per 100 Inhabitants (2010)



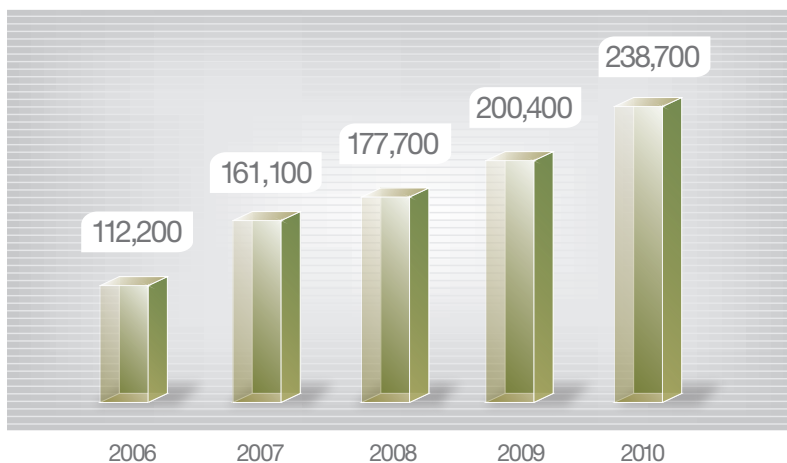
Source: International Telecommunication Union, 2010

b. Number of Internet Subscriptions in Macedonia by Year



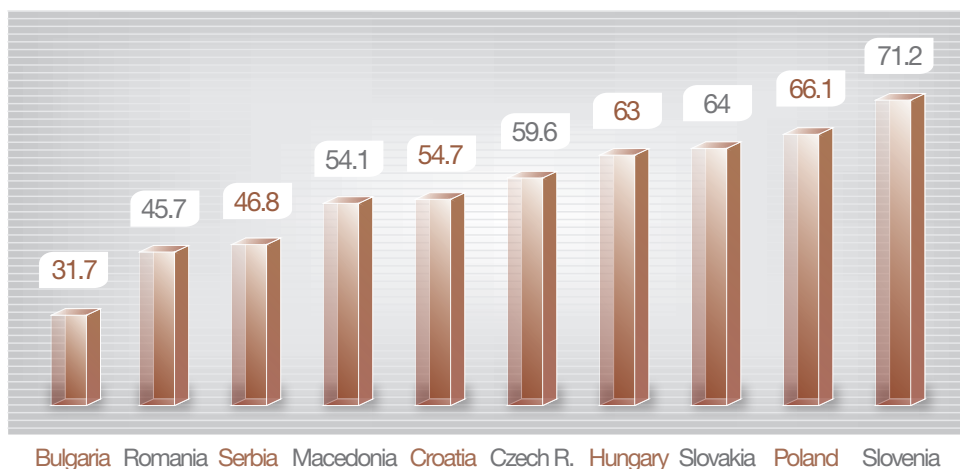
Source: Agency for Electronic Communications of the Republic of Macedonia

TV SUBSCRIBERS (Cable, IPTV, DVB-T and Satellite) by year



Source: Agency for Electronic Communications of the Republic of Macedonia

COMPUTERS PER 100 INHABITANTS, 2007

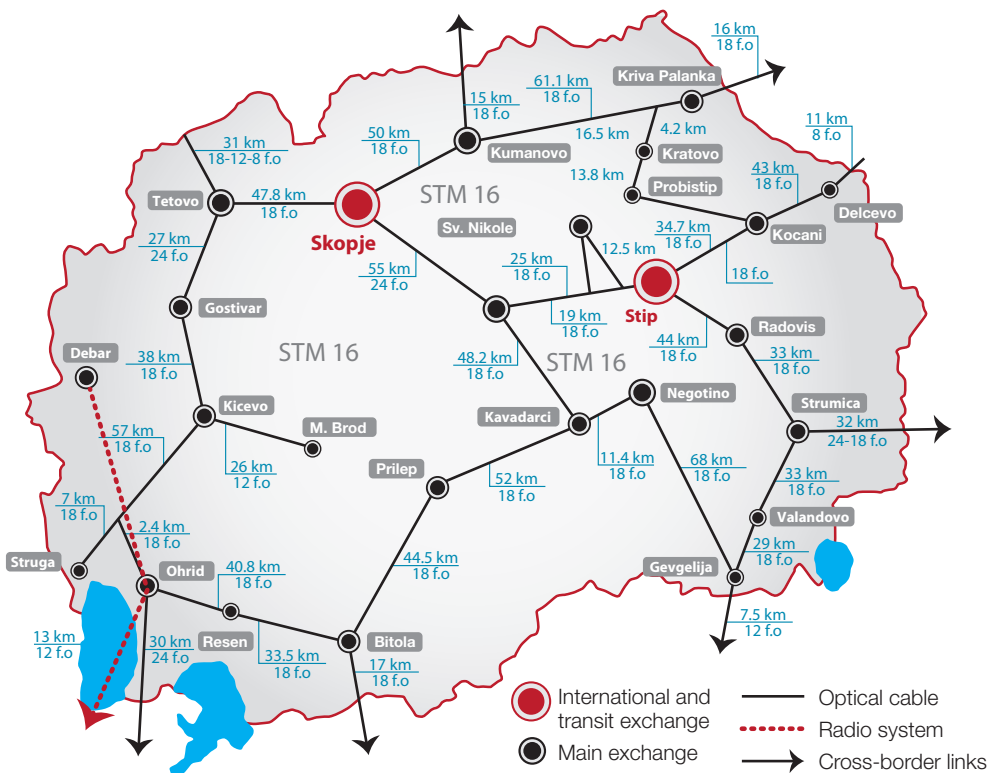


Source: International Telecommunication Union

In the Republic of Macedonia there has been a 1.4% increase from 2010 to 2011 of individuals between the ages of 15-74 using a computer, noting that 75% of these individuals use a computer on a daily basis.

EXCELLENT ICT BASE

TELECOMMUNICATIONS INFRASTRUCTURE

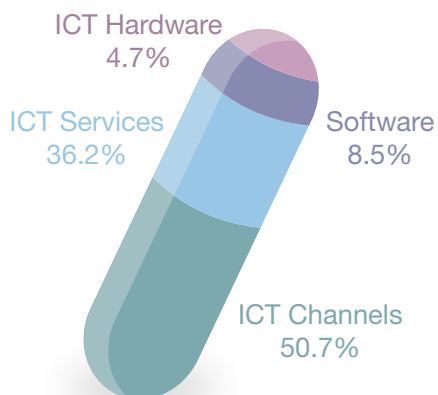


NUMBER OF ELECTRONIC COMMUNICATIONS OPERATORS IN MACEDONIA

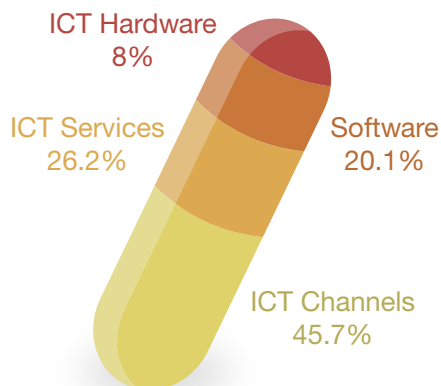
OPERATORS	Fixed Telephone	Cable Services	3G	WIMAX
	35	75	2	5
	Mobile	Internet	VoIP	Digital TV services
	3	75	34	5

MACEDONIAN ICT SECTOR

a. Companies in ICT sector (% of total)



b. Employees in ICT sector (% of total)



Source: Central Registry of the Republic of Macedonia, 2009

COMPETITIVE OPERATING COSTS

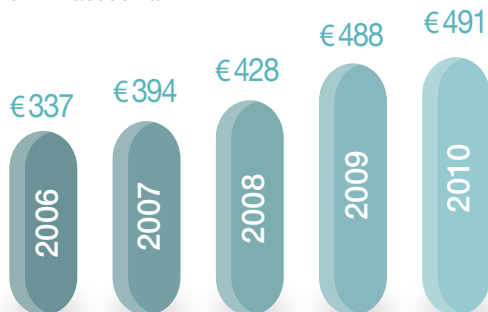
AVERAGE GROSS MONTHLY SALARY

a. in selected countries of Central and Eastern Europe, 2010



Source: Vienna Institute for International Economic Studies (wiiw)

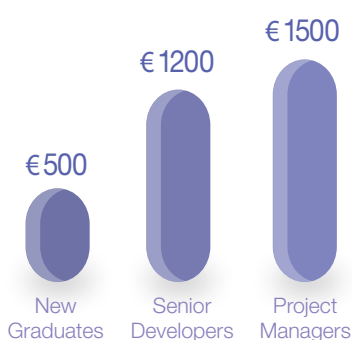
b. in Macedonia



Source:

Vienna Institute for International Economic Studies (wiiw)

c. in the ICT sector in Macedonia



Source: Invest Macedonia 2011

OFFICE RENT AND ELECTRICITY COSTS

Office Rent

€7.5 - €22.5 /m²/month

* Average sales price for all users

Electricity Price

€6.5/100 kWh*

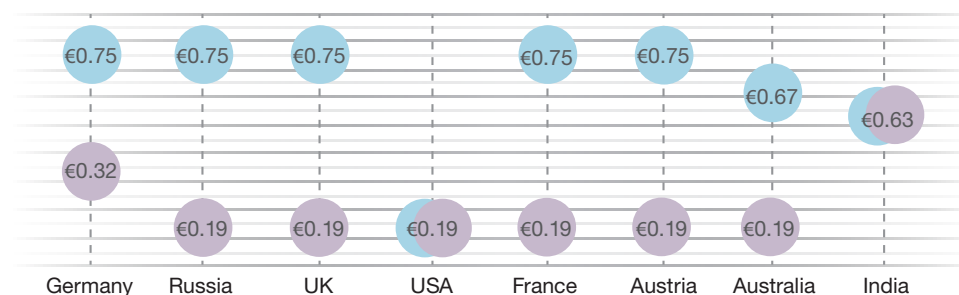
Source: Invest Macedonia,
Energy Regulatory Commission
of the Republic of Macedonia

COST FOR TELEPHONE INSTALLATION

Initial connection fee for a standard (PSTN) line: ~ €10

Initial connection fee for a digital (ISDN 2) line: ~ €20

PRICE PER MINUTE FOR INTERNATIONAL PHONE CALLS



* Exchange rate €1=61.5 MKD

Source: Invest Macedonia

● Fixed Telephony ● Mobile Telephony

INTERNET CONNECTION COST

Private Users			
Download/upload speed	6Mbps / 768Kbps	8Mbps / 768Kbps	10Mbps / 768Kbps
Transfer (download and upload)	30 GB	60 GB	Unlimited
Yearly contract (approximately)	€10 / month	€20 / month	€28 / month
Open-end-contract (approximately)	€15 / month	€25 / month	€33 / month

Companies			
Download/upload speed	12Mbps / 1Mbps	14Mbps / 1Mbps	16Mbps / 1Mbps
Transfer (download and upload)	60 GB	150 GB	Unlimited
Yearly contract (approximately)	€25 / month	€57 / month	€96 / month
Open-end-contract (approximately)	€31 / month	€65 / month	€102 / month

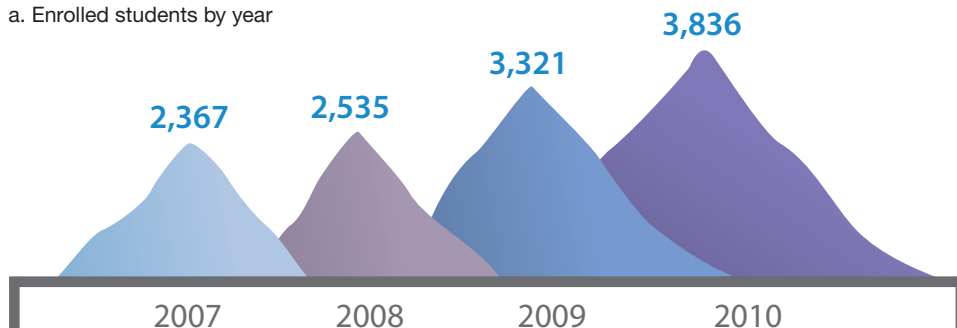
Source: *Invest Macedonia*

SUSTAINABLE WORKFORCE SUPPLY

ENROLLED AND GRADUATED STUDENTS IN ICT BRANCHES

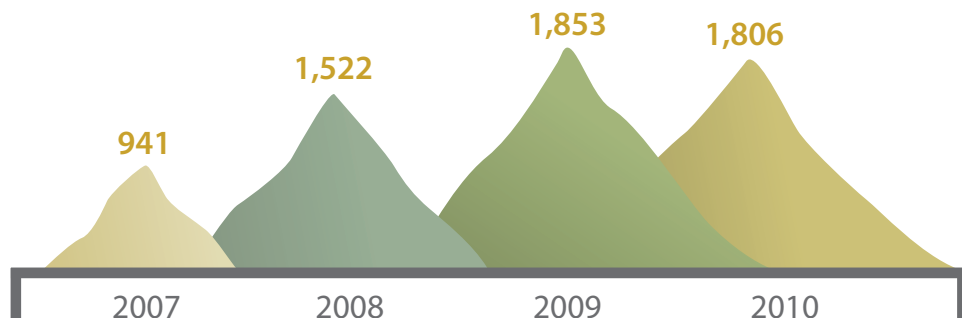
With 41% of the population under the age of 30, Macedonia has a plentiful supply of young educated people. The number of ICT graduates has doubled over the last four years.

a. Enrolled students by year



Source: *State Statistical Office of the Republic of Macedonia*

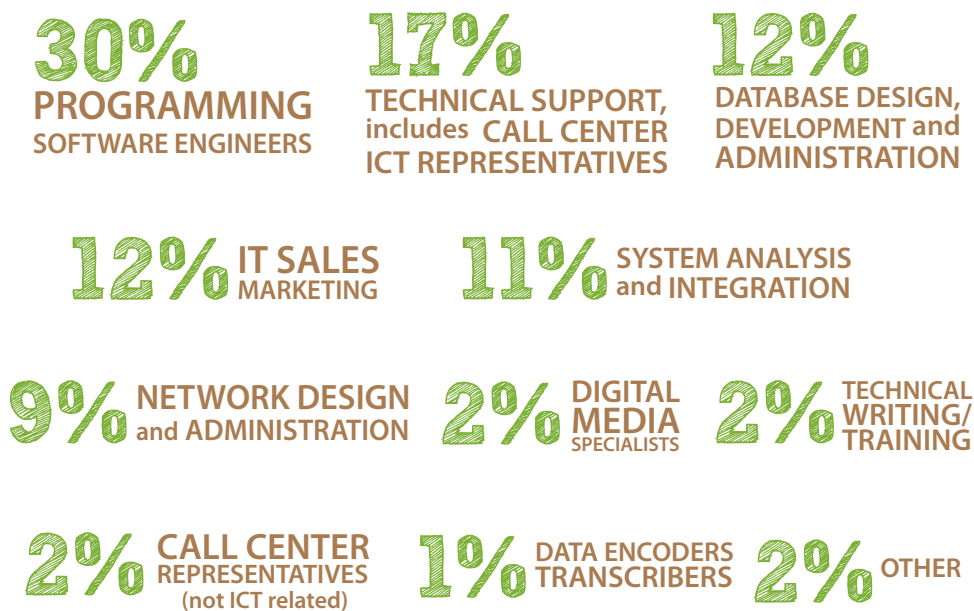
a. Graduated students by year



Source: State Statistical Office of the Republic of Macedonia

In addition, over 2,000 students are enrolled each year in secondary schools in specialized branches of electronics, telecommunications, computer science, and automatics.

STRUCTURE OF THE ICT WORKFORCE



Source: IT Workforce demand survey, MASIT

EXCELLENT LANGUAGE SKILLS

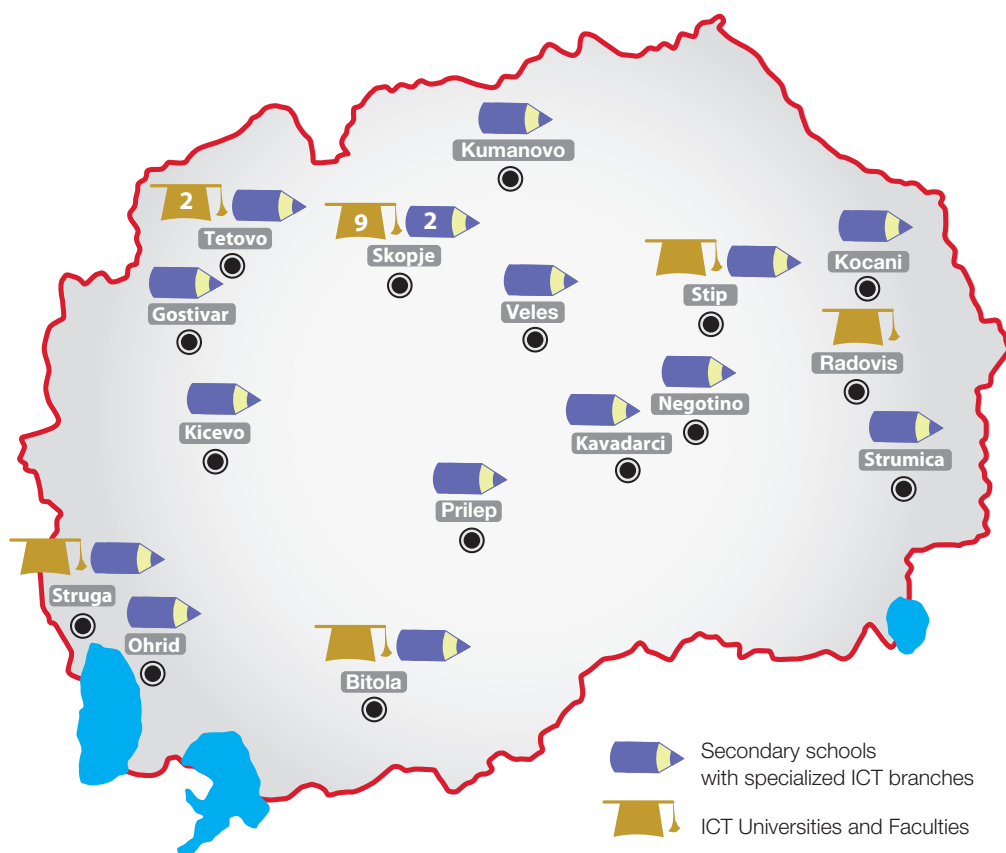
Every child in Macedonia begins to learn English in the first grade of primary school. Two foreign languages are mandatory in high school as well: English, and either German, French, or Russian. English is also taught for two years at University level. Regional languages (Serbian, Croatian, Bulgarian, Albanian, Greek, and Turkish) are widely spoken.

Source:

State Statistical Office
of the Republic of Macedonia, 2010

Foreign Languages Studied	% of total students in:	
	Primary Schools	Secondary Schools
English	98%	96%
French	18%	32%
German	6%	21%
Italian	-	2%
Russian	1%	2%
Turkish	3%	2%

ICT EDUCATIONAL CENTERS IN MACEDONIA



STATE ICT UNIVERSITIES AND FACULTIES

“Ss. Cyril and Methodius” University – Skopje www.ukim.edu.mk	Faculty of Electrical Engineering and Information Technologies (www.feit.ukim.edu.mk) Faculty of Mathematics and Natural Sciences Institute of Informatics (http://www.ii.pmf.edu.mk) Faculty of Computer Science and Engineering (http://www.finki.ukim.mk)
University “St. Kliment Ohridski” – Bitola www.uklo.edu.mk	Faculty of Technical Sciences (www.tfb.edu.mk) Informatics and Computer Techniques
University for Information Science and Technology – Ohrid http://www.uist.edu.mk	
“Goce Delcev” University – Stip www.ugd.edu.mk	Faculty of Computer Science – Stip (inf.ugd.edu.mk) Faculty of Electrical Engineering – Radovish (etf.ugd.edu.mk)
State University of Tetovo – Tetovo www.unite.edu.mk	Faculty of Math-Natural Sciences Informatics Department

PRIVATE ICT UNIVERSITIES AND FACULTIES

South Eastern European University – Tetovo www.seeu.edu.mk	Faculty of Contemporary Sciences and Technologies
European University – Skopje www.eurm.edu.mk	Faculty of Informatics
FON University – Skopje and Struga www.fon.edu.mk	Faculty of Information and Communication Technology
New York University Skopje – Skopje www.nyus.edu.mk	Faculty of Computer Science and Information Technology
University American College Skopje – Skopje www.uacs.edu.mk	Computer Science and Information Technology
MIT University – Skopje www.mit.edu.mk	Faculty of Computer Science and Technology
International Balkan University – Skopje www.ibu.edu.mk	Faculty of Technical Sciences Information Technologies Department

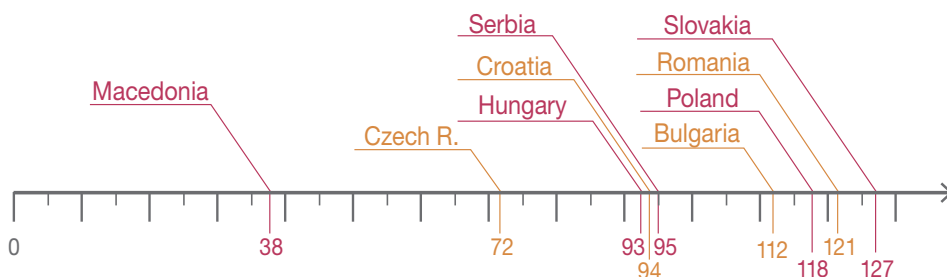
GOVERNMENT SUPPORT OF E-SOCIETY

With the help of the Government and a new Ministry for Information Society, Macedonia is advancing in the areas of E-Infrastructure, E-business, E-government, E-education, E-health, and E-citizens. Successful projects help build a sustainable IT culture:

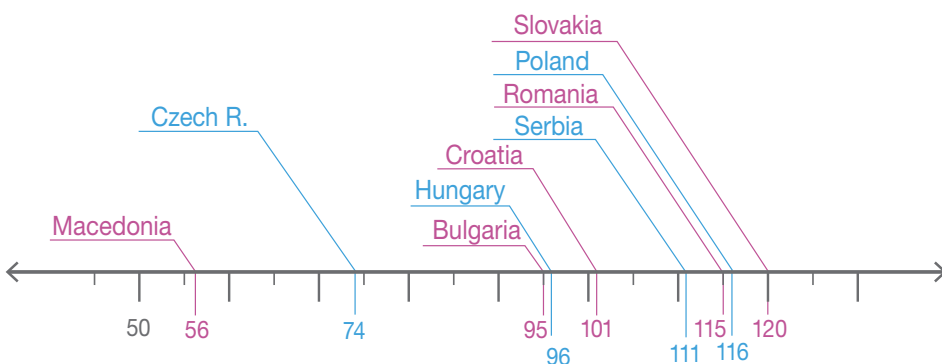
- A computer for every child in primary and secondary schools
- Scholarships for talented IT students
- Valuable vouchers for students as a direct subvention when buying computers
- Newly opened Faculty of Computer Science and Engineering
- Newly opened University for Information Science and Technology in Ohrid
- Protection of digital intellectual property
- Free internet sessions
- Free of charge internet clubs
- Free computer applications training

WORLD RANKINGS – World Economic Forum, The Global Information Technology Report 2010-2011

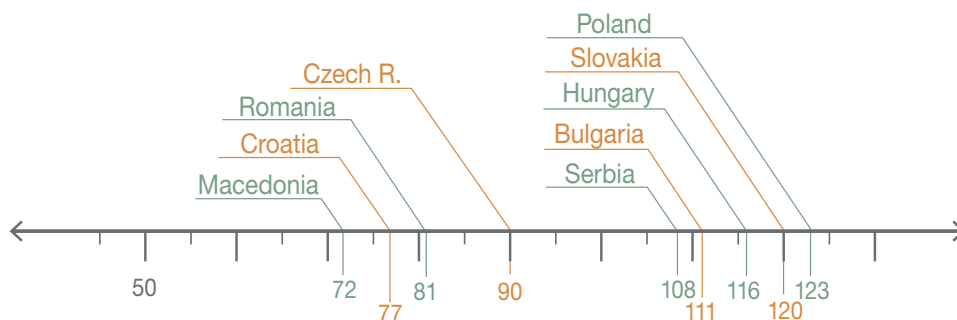
Government prioritization of ICT



Importance of ICT to government vision of the future



Government success in ICT promotion



Note: The ranking covers 134 economies in the world.

Source: World Economic Forum (*The Global Information Technology Report 2010-2011 / The Network Readiness Index 2008-2009 Rankings / Readiness Subindex and Usage Subindex*)

LEGISLATION FULLY HARMONIZED WITH EU

Laws covering the ICT sector:

- Law on Electronic Communications
- Law on Broadcasting Activity
- Law on Copyright and Related Rights
- Law on Industrial Property
- Law on Protection of Competition
- Law on Electronic Commerce
- Law on Personal Data Protection
- Law on Data in Electronic Form and Electronic Signature

Institutions responsible for the ICT sector	
Ministry of Information Society	www.mio.gov.mk
Ministry of Transport and Communications Department of Communications	www.mtc.gov.mk
Committee for Information Technology	www.kit.gov.mk
Agency for Electronic Communications of the Republic of Macedonia	www.aek.mk
Broadcasting Council of the Republic of Macedonia	www.srd.org.mk
Macedonian Academic and Research Network (MARnet)	http://dns.marnet.net.mk

ICT CHAMBERS, RESEARCH CENTERS, AND ASSOCIATIONS

MASIT – ICT Chamber of Commerce	www.masit.org.mk
Economic Chamber of Macedonia / IT Association - Macedonian Association of the IT Companies	www.mchamber.org.mk
Macedonian Chambers of Commerce / ICT Chamber	www.sojuzkomori.org.mk
Macedonian Academy of Sciences and Arts	www.manu.edu.mk
Macedonian e-Society Association (MESA)	www.e-society.org.mk
e-Gov Project	www.egov.org.mk
Foundation for sustainable ICT solutions “Metamorphosis”	www.metamorphosis.org.mk

MEMBERSHIP IN INTERNATIONAL ORGANIZATIONS

The Republic of Macedonia is a member of the following international organizations:



INVEST IN MACEDONIA

Political and Economic Outlook

- Political, monetary, and macroeconomic stability
- Strategically located for future expansion
- First country in SEE to sign a SAA with the EU in 2001
- EU and NATO candidate country
- Business oriented Government (re-elected in June 2011 with a 4 year term)
- Welcoming and decisive government ready to serve investors

Foreign Investment Regime

- Macedonian Constitution guarantees fair treatment of foreign investors
- Complete protection of the ownership rights of foreign investors
- Republic of Macedonia is a member of MIGA (Multilateral Investment Guarantee Agency)
- Investment protection treaties with numerous countries
- 100% foreign ownership of a company permitted
- No restrictions for repatriation of profits

Unbeatable Fiscal Benefits

- 10% Corporate & Personal income tax (among the lowest in Europe)
- 0% Tax on retained earnings
- Double taxation treaties with many European countries
- Special tax incentives for operation in the Technological Industrial Development Zones
- Real estate taxes at 2% - 5%
- VAT at 18%, with 5% on specific items
- 5% VAT on computers, computer parts, and software
- FTAs with EU, EFTA, CEFTA countries; Turkey and the Ukraine; providing access to over 650M customers
- 1/4 of social contributions cut by 2012

Accolades



[World Bank's
Doing Business
2012 Report]



[Paying Taxes 2011,
PwC and
World Bank
Group Study]



[Forbes Magazine's
2009 Tax Misery
and Reform Index]



Invest Macedonia, the official Government agency responsible for attracting and developing foreign investments is a full service agency prepared to guide you throughout the decision-making process.

As an institution dedicated to making this process as beneficial and effortless as possible, we are eager to lead you through the initial inquiry phase, arrange a suitable itinerary to visit Macedonia, and culminate with an objective evaluation of the potential success of your project in Macedonia in comparison to neighboring countries, based on the current business climate. If your business requires finding suitable local partners, we will aid you through the process and ensure that an open exploratory dialogue can take place.

Meeting your business requirements is our primary goal. Our Aftercare program will provide assistance by mediating on your behalf with local authorities and the Government, supporting your expansion or reinvestment needs, aiding in obtaining required permits, and be at your disposal at all times to ensure the continued success of your business venture in Macedonia. Invest Macedonia understands the ever changing business needs as an operation grows, and to that effect, we pledge to collaborate closely with you to facilitate that growth in Macedonia.

INTERNATIONAL OFFICES:

Austria, Belgium, Croatia, France, Germany, Italy, Kosovo and Albania, The Netherlands, Poland, Russia, Serbia, Sweden, Turkey, United Kingdom, Canada, United States of America, South America, PR China, India, Japan, Qatar, Kazakhstan and Azerbaijan.

Agency for Foreign Investments
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of the Republic of Macedonia

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