

1st IT STAR Workshop on "Enabling ICT R&D in Central and South-Eastern Europe",

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Lazarevic Ljubisav

Deputy President,

***Committee for Education and
Workforce Development***

contact@masit.org.mk

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Agenda

1) Overview of the ICT Market and Industry in Macedonia (MASIT Project with IDC)

2) MASIT and R&D in ICT in Macedonia

Who is MASIT

- Established 2005 by 15 leader IT companies in Macedonia
- September 2006, 60 companies and 52 IT experts
- >80 % of domestic IT market
- Organisation of conferences and workshops on national and international level - SEEITA conference (SE Europe IT associations)
- Member of WITSA

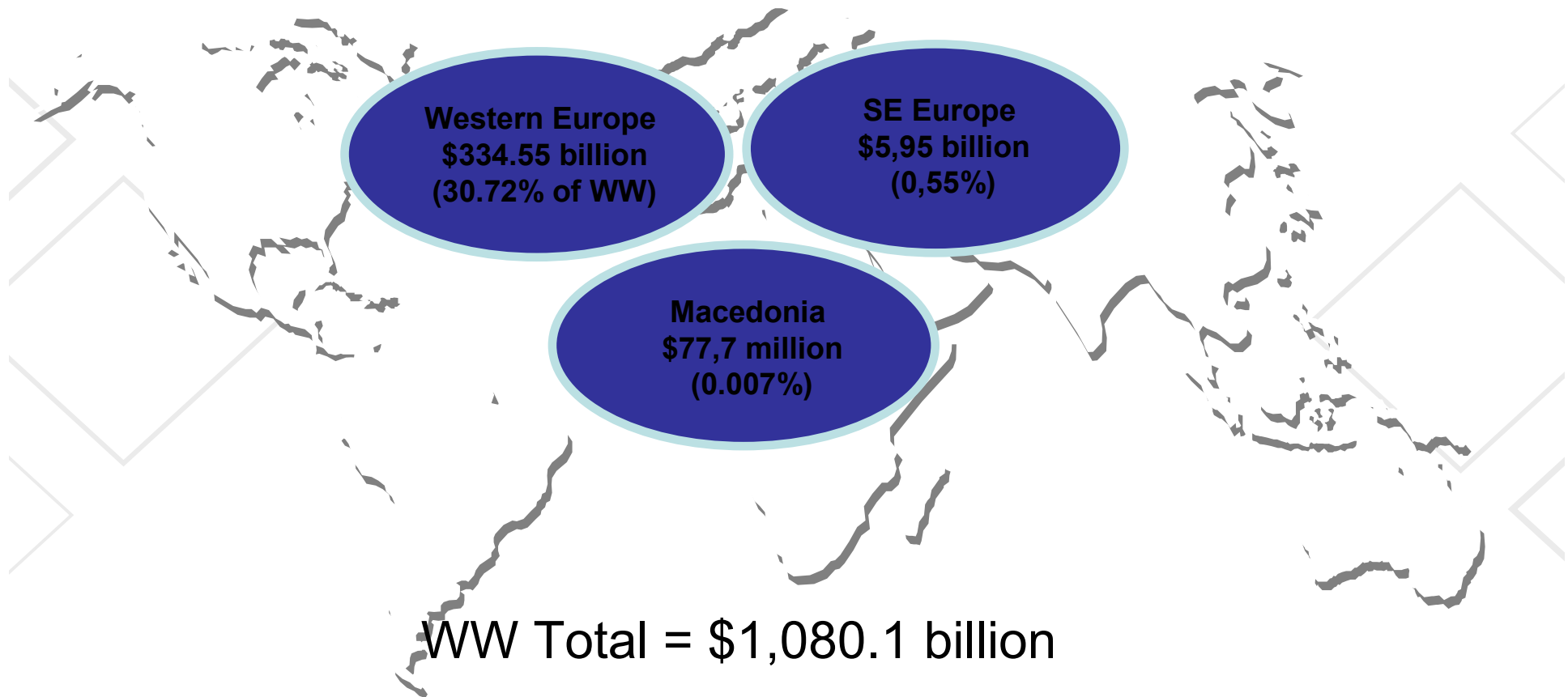
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IDC survey in Macedonia

Study could serve as:

1. Foundation for negotiations among the MASIT, government, and other stakeholders in securing more favourable and encouraging environment for growth of the ICT industry and economy as a whole
2. Groundwork for articulating the country's development strategy for the ICT industry
3. Starting point for further, more granular analysis of particular issues

(2) Position of SE Countries and Macedonia in Global IT Market, 2005 (IDC)

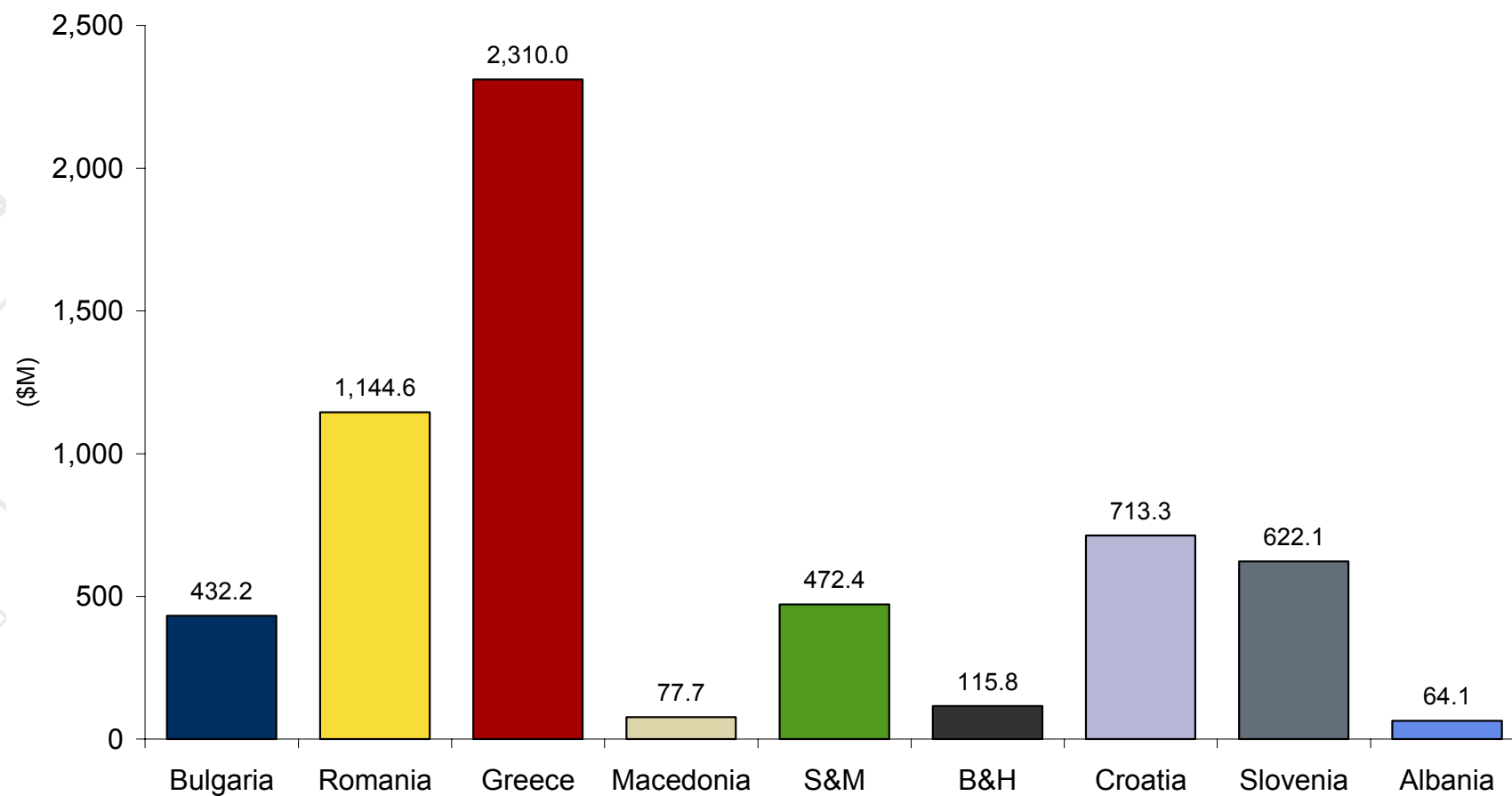


IT Market in Macedonia

(IDC, December 2004)

- **IT Spending in Macedonia (1,4% GDP)**
 - Y2005 – IT market \$77,7M (% of exports unknown)
 - H/W - \$33,3M (37.000 PCs, Servers, >60% hybrids)
 - Storage – \$2,5M (disk systems, tape)
 - Peripherals - \$8,7M (printers, handhelds, adds)
 - Networking - \$4,6M (active & passive, wireless)
 - S/W - \$12,7M (system s/w, applications & development)
 - Services - \$15,9M (education, consulting, maintenance)
 - IT MNCs represented through many wholesalers and retailers
 - >400 active IT companies, <30 serious players
- **IT Industry potential - >15% growth/year:**
 - ❖ Technology Services & S/W exports are virtually 100% value-added - positive effect on foreign exchange and gross payroll
 - ❖ The average IT job pays more than 2x the national average
 - ❖ IDC/EITO benchmarking methodology IT Industry Survey – IT industry size, 6 sectors competitiveness SWOT analysis, relative position within the economy (revenues, value added, employment, salaries, foreign trade), October 2005 – April 2006

IT Markets (\$M) in SE Europe Countries, 2005



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- *Opportunities*

- Existing engineering and manufacturing tradition.
- Tighter partnership with government if the latter started to offer incentives for local vendors or purchase locally assembled machines on a larger scale.

IT Channel Companies SWOT, 2005

- *Opportunities*
- Mergers and acquisitions in the category to enhance relative strengths of the distributing enterprises.
- Geographic location of Macedonia as potential distribution center of international vendors for Balkan region.
- Logistical economies of scale with penetrating the rising neighboring markets (fixed costs spread by supplying several markets).
- Domestic market too small and deserving to attract the international distribution players, thus making a more comfortable position for local distributors.

National Strategy for development on Information Society

- Task Force members came from various sectors of society and include IT experts, MPs from the government and the opposition, representatives of the state administration, local governments, educational institutions, the business and the civic sector.
- Addopted in Macedonian Parlament in 2005
- With the National Strategy Macedonia managed to develop its own Action Plan for bigger economic growth and employment

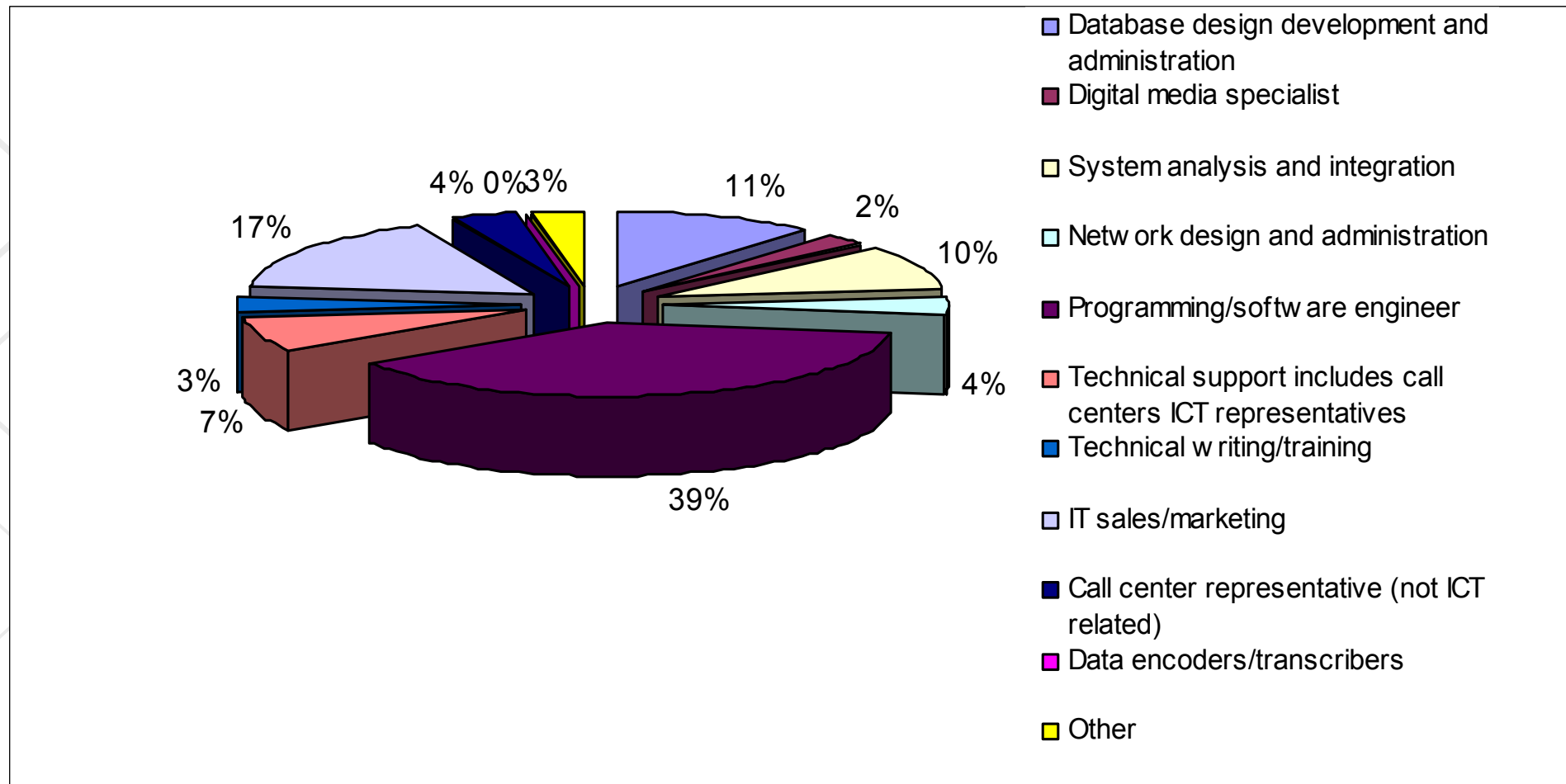
National Strategy for development on Information Society

- “Just like the case with the EU, Macedonian society commitment is moving towards building unique information space, towards innovations and investments in information and communication technology and towards better quality of living of its citizens,” said Macedonian president Branko Crvenkovski

The Macedonian Information and Communications
Technology (ICT) Workforce Demand Survey 2005
General info

- Survey completed between September 2005 - February 2006
- 6 IT Faculties Included
- WITSA (World Information Technology & Services Alliance) methodology used
- 82 organizations questioned:
 - ICT (41)
 - Non ICT (33)
 - Other (8)

Structure of the demanded ICT specialists for 2006



Recommendations

There is mutual consensus that it is very important to **improve the quality of the higher education**. The recommendations are focused on several matters:

- The academia should train students in what is being demanded by the companies
- The companies should offer structured value adding internships and on the job training.
- The ICT industry should co-design the ICT curricula with the universities

Development Projects Education

Macedonia connects project

- World first all-wireless Internet country

USAID invest 4 mil USD in this project and with local hired companies provide wireless Internet access to all Macedonians schools.

Completed by September 2005

MASIT & Government goals

1. Economic Growth support (10 goals):

Vardar Silicone Valley – focus on investments in IT, FDIs only by Fortune 500?

Outsourcing – focus on Software Development & IT Services Outsourcing

Team Macedonia – ICT part of the team for attracting FDIs?

Invest Macedonia – ICT Industry “Value Proposition”, tax privileges definition?

Investment Consulting – ICT industry analysis, top multinational consulting company to foster the ICT industry competitiveness (EUR 9M)?

Red Sun – ICT Quality Certifications?

Small, But Big – 50.000 EUR ICT export oriented companies marketing support?

Equity Funds & No Barriers for Good Ideas – one for agriculture, the other for the ICT industry (EUR 5M)?

Top Management – training for as many ICT companies’ managers as possible out of 500?

MASIT – part of all ICT regulatory bodies and new Ministry of ICT & supported by all appropriate public administration institutions – STRATEGIC PARTNER ???

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MASIT & Government goals

2. E-Investments support (5 programs):

I know, Too – computer literacy for citizens aged 18-60, schools?

My First Computer – purchase of more than 50.000 PCs?

Macedonia On-Line – Wi-Fi & Wi-Max free internet access?

Let's Surf – free Internet access for schools – IT Channel Companies & Donors?

Macedonia – Land of IT Engineers – 5.000 IT engineers, scholarships (EUR 20M)

3. E-Projects support (7 projects):

Computerization of all Border Crossings – RFED Supply Chain Solution?

E-Healthcare IS & e-Health Card – healthcare web portal?

Orderly Court Cases – Document Management System for judiciary?

Personal ID Documents in 30 minutes – computers in all centers of Min.Inter.?

Electronic Land Register & GIS – digitalization?

Non-Cash Payment & e-Society – digital certificate & e-ID Card for citizens?

Computerization of the Public Revenue Office – electronic DB, accounts mngmt.

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Contacts

Toni Petreski, President
toni@inet.com.mk

Lazarevic Ljubisav
lazarevic@ekonet.com.mk

Anita Nikova, Katerina Damevska
Executive Secretary
+389 2 3238.601

www.masit.org.mk

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