


Expanding ICT regional Competitiveness
Skopje, 16-17 May, 2007


**Macedonian ICT Cluster,
the Role of MASIT and
The ICT Quality Certification Program as
a Factor of Macedonian ICT SMEs
Competitiveness.
INet Inc. – Case Study**

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INet Inc., CEO


Presentation Content

- 1. Macedonian ICT Industry & Cluster**
2. MASIT – ICT Institution for Collaboration
3. Promotion of Innovation & New Technologies – IT Mark
4. INet Inc. – IT Mark Implementation Experience



Macedonian IT Market
(IDC Estimation, November 2006)

- **IT Y2006 - \$85,4M !**
- **IT Y2007 - >\$100M !**
 - MASIT's initiatives to get there:
 - Boosting Software & IT Services Exports
 - Retaining talented professionals
- **IT Y2010 - >\$200M ? (IDC - \$150M)**
 - **Fostering ICT cluster competitiveness factors**



ICT Industry Role in Macedonian Economy, 2005

- Number of Enterprises (520) **1.2%** (IT 0.9%, Telco 0.3%)
- Number of Employed (<6.000) **2.1%** (IT 0.7%, Telco 1.4%)
- Revenues **5.3%** (IT 1.2%, Telco 4.1%)
- Value Added **10.5%** (IT 1.1%, Telco 9.4%)
- Exports (Goods and Services) **2.9%** (IT 0.4%, Telco 2.5%)



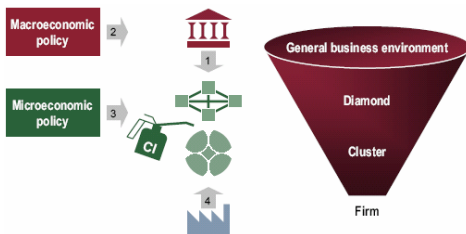
IT Market in Macedonia

- **IT Spending in Macedonia (1,4% GDP)**
 - Y2007 FORECAST – IT market >US\$ 100M
 - >420 active IT companies, <30 serious players
- **IT Industry potential - >15% growth/year:**
 - ❖ Technology Services & S/W exports > 50% value-added
 - ❖ Average IT job pays more than twice the national average
 - Firms operate in “clusters” of related industries – the Government of RM identified the ICT industry as one with the highest value-added – the ICT Cluster established in October 2003



Cluster Competitiveness

Business Environment & Forces of Change



Solvel et al. 2003



Presentation Content

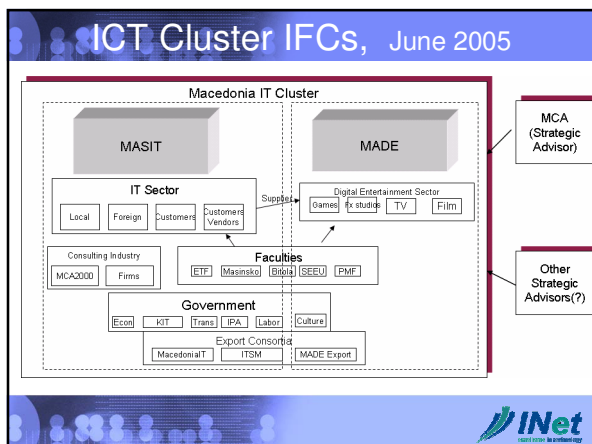
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Who is MASIT


- Macedonian non-profit ICT Institution for Collaboration (IFC), established in 2000 by top 15 IT companies
- Today: 74 top national ICT industry companies, including Microsoft, Oracle, Cisco, HP... +58 ICT Experts Council professionals (individuals)
 - Macedonian NECC (National Entrepreneurship and Competitiveness Council) Managing Board member
 - WITSA (World Information Technology and Services Alliance) Steering Committee member
- **MASIT Mission – to foster the competitiveness of the domestic ICT companies !**






MASIT & ICT Cluster (2004 - 1/2)

- **Cluster Dynamism** – too young, taking shape (difficult to assess):
 - Domestic focus
 - Weak horizontal relationships
 - “Copycat”, stand-alone not co-operative firms’ strategies
 - + Higher level of firms’ growth
- **Cluster Competitiveness** = MASIT’s objectives:
 - + Promotion of innovation & new technologies, providing technical training
 - + Brand building, export promotion
 - + Lobbying government for international trade and investment linkages (PPP) = attracting new firms
 - + Fostering networks among IT firms and people
 - +/- Analyzing technical trends, establishing technical standards




MASIT & ICT Cluster (2004 - 2/2)

- **Cluster Development**
 - Leadership – IT industry itself
 - Financing – ICT companies, Donor Community (USAID/EU), or...
 - Resources – budget for projects, exchange with other clusters = attracting new firms
 - **Facilitator** – deep knowledge, strong network of contacts, not political clout
 - Framework – MASIT & other ICT IFCs to spent time and effort on shared vision & consensus on actions to perform



MASIT & ICT Cluster Competitiveness

- **MASIT & ICT Cluster will:**
 - Not attempt to position the country as the “Gateway to SE Europe” or “Silicon Valley of the East”
- **MASIT role is far from “trivial” – important player of shaping the potential for upgrading the ICT cluster:**
 - MASIT to improve the ability to form alliances and partnerships (factor of competitiveness)
 - MASIT to raise awareness of the ICT cluster on a world scale
 - MASIT to help the ICT firms to develop critical mass for market niche export-oriented domestic ICT brand(s)
- MASIT to manage perception as a “Particular Regional Center” for some ICT goods (recognized by Silicon Valley)
 - **IF NOT = ICT Cluster potential limited & locally focused**



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ICT Cluster Competitiveness Factors = MASIT ACTION PLAN

1. PROMOTION OF INNOVATION & NEW TECHNOLOGIES – **SETTING TECHNICAL STANDARDS (CMMI, IT MARK...),**
2. ICT HUMAN CAPITAL UPGRADE – ICT WORKFORCE DEMAND SURVEY - INCREASING IT FACULTIES QUOTAS, ICT QUALIFICATION PROGRAMS FOR UNEMPLOYED & ECDL INTRODUCTION
3. EXPAND THE ICT CLUSTER BY BRAND BUILDING – IDC ICT INDUSTRY SURVEY - MASIT ICT ANNUAL AWARDS
4. EXPAND THE ICT CLUSTER BY EXPORT PROMOTION – **ICT INVESTMENT FUND, ESTABLISHING MACEDONIAN ICT CENTER OF EXCELLENCE - VARDAR SILICONE VALLEY**
5. INTERNATIONAL TRADE AND INVESTMENT LINKAGES – MASIT IN THE FOREIGN DELEGATIONS – WITSA STEERING COMMI.
6. IMPROVING INFRASTRUCTURE, REGULATIONS & POLICIES – ICT PUBLIC PROCUREMENT PILOT PROJECT, LABOR BENCHMARK
7. FOSTERING NETWORKS AMONG ICT FIRMS AND PEOPLE – SEEITA & MASIT OPEN DAYS CONFERENCE, EICTA MEMBERSHIP



MASIT Action Plan Implementing Bodies

- General Assembly elects Managing Board of 15 members – President, Vice-President, 4 Committee's Deputy Presidents
- Institutional Development Permanent Working Group
- Four Operating Committees:
 - Local Market Devel. & Events Planning
 - Competitiveness
 - Education & Workforce Development
 - **Software & IT Services**
- Advisory Board (5), Ethics Committee (5)
- IT Experts Council (58)
- Executive Office professionals



MASIT Software & IT Services Committee

- **Quality Certification Programs: CMMI / IT Mark**
Implementation in 10 domestic ICT companies by the end of 2008 – 3 already IT Mark certified by February 2007
- **Training Programs:** PMI Certification, Product Management & Marketing, Sales...
- **ICT Awards:** introduction of the "MASIT Annual Awards" based on WITSA Annual Awards – "Macedonia – First Wireless Nation" WITSA 2006 Winner



MASIT & IT Mark – Case Study (1/2)

- **July 2005:** First IT Mark Seminar with ECI Center Bulgaria
- **August 2005:** MASIT, ESI Center Bulgaria & USAID/RCI decided to initiate the "IT Mark Certification" project
- **November 2005:** Second IT Mark Seminar with ESI Center Bulgaria
- **December 2005 –** 3-day seminar "Introduction to CMMI" with ESI trainer from Bilbao – Spain – 11 Macedonian & 3 Bulgarian companies participated



MASIT & IT Mark – Case Study (2/2)

- **June 2006:** 5 Macedonian SMEs have submitted completed forms to ESI Center Bulgaria
- **August 2006:** The 5 SMEs have passed through the IT Mark consulting service conducted by ESI Center Bulgaria – 1 SME Certified
- **December 2006:** Re-assessment of the rest 4 SMEs
- **January 2007:** – Additional 2 SMEs Certified
- **Financials:** the whole process cost 700 EUR/company




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Who is INet Inc. Skopje

- Macedonian ICT SME since 1991
- Value-Added Technology Distributor & Channel Innovation Company
- Serves its ICT Business Partners (ISVs, SIs, VARs...)
- 15 Employees
- Annual revenue: 2,2 million USD



INet Inc. & IT Mark – Case Study

Why not only Software Intensive Organizations, but also a Valued-Added ICT Distributor as INet Inc. is, implemented the IT Mark?

- To improve the management & technical performance
- To gain market recognition for the capability assessed by means of world class models & standards
- Attain a market differentiator

TO BE MORE COMPETITIVE !




The Main Goal

- To foster the Competitiveness through 3 key internal improvements:
 - Understanding our customers
 - Positioning the company against our competitors correctly
 - Knowing and improving our own capability




INet IT Mark Certification Process

- **First Appraisal - August 2006:** ESI Center Bulgaria has carried out the first assessment
- **Second Appraisal - December 2006:** ESI Center Bulgaria has carried out the second assessment
- **Final Appraisal - February 2007:** ESI Center Bulgaria has carried out the final on-line assessment




Achieved objectives/Benefits

- Raised qualification of the core staff through participation in seminars and appraisals
- Improved management and technical performance as an outcome of the tutorial provided by ESI Center Bulgaria consultants
- Gained Market recognition for the capability, assessed by means of world class models and standards



Lessons Learned

- Processes are planned, documented, performed, monitored, and controlled **at the project management level**
- Objectives established for the process (cost, schedule, quality objectives) are achieved
- Requirements, standards, and process objectives for the process and work products are defined and documented
- The work products and services satisfy the specified requirements, standards, and objectives...



INet Inc. Quality Methodology Strategy

Intended activities in the next 18-24 months:

- CMMI level 2 & ITIL v3 (IT Infrastructure Library) – a new certification model for services (starting September 2007)**
- ESI Center Bulgaria & Donor's support needed

Recommendation to the Macedonian ICT Community:


- CMMI - from 'nice to have' to 'must have' for any IT professional organization**



ICT Industry & Government of RM 2007

Vardar Silicone Valley – focus on **PRIVATE** investments in **Macedonian ICT Center of Excellence** (supported by **USAID & Israeli consultants**), by partnering with leading **Macedonian ICT IT Mark certified SMEs**, the **international financial institutions** who already voiced the readiness to participate in the initiative & the **Government of Macedonia**

- IT Industry to become an important part in the Macedonia – not 1,4%, but 3% of the GDP by 2010**
- ICT Industry to support one home base industry/cluster that needs ICT capabilities to provide agility, modernization and profitability, and in the same time enabling the export (ex. Agriculture)**



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