

THE NATIONAL INNOVATION SYSTEM AND TECHNOLOGY PROGRAMMES

IVANA NAGY, PHD
TEHCRO PROGRAMME DIRECTOR
BUSINESS INNOVATION CENTRE OF CROATIA – BICRO LTD.



ABOUT US...

Business Innovation Centre of Croatia is an innovation and investment company established by the Croatian Government with the aim of supporting technology transfer and commercialisation activities mainly in the innovative small- and medium-size entrepreneurship sector by creating instruments and offering alternative sources of finance to innovative companies (including seed & VC) and supporting establishment and operations of technology incubators, S&T parks and related infrastructure.

Main areas of activity:

- Operate 5 technology programmes on the national level
- Support MSES in formulation of STI policy and implementation
- Involved in programming of EU pre-accesion assistance (IPA) and SF usage as IB for the Regional Competitivness programme(s)
- Implementation of EU programmes:
 - CIP Coordinating partner for technology transfer activities of the Enterprise Europe Network (EEN) in Croatia
 - EUREKA (administration)
 - BIOCenter (IPA III C Major project)



CONTENT

- Intellectual property framework
- Elements of the Croatian National Innovation System (NIS)
- Available Technology Programmes
- Discussion?



INTELLECTUAL PROPERTY

- A long history of Intellectual Property protection in Croatia (since 1884)
- Legal Regulations adopted by MSES on 21 May 2004 were published in OG no. 72/04 of 1 June 2004
- Croatian legislation is harmonized with all European and international regulations and standards.
- Applicable National Laws:
 - 1. Patent Law
 - 2. Trademarks Law
 - 3. Law on Geographical Indications and Designations of Origin of Products and Services
 - 4. Law on the Protection of the Topographies of Semiconductor Products
 - 5. Industrial Designs Law
 - 6. Copyright and Related Rights Law



INTELLECTUAL PROPERTY

"National Strategy for Development of the Intellectual Property System in Croatia 2005 - 2010" accepted by the Government in 2005.

The goals are:

- to provide IPR protection comparable to EU level
- to ensure application of IPR as a lever for economic growth, up to the standards of EU countries with the highest European Creativity Index (ECI)

State Intellectual Property Office (SIPO) - a pivotal institution of national intellectual property system

corresponding European (EPO) and world (WIPO and WTO) institutions



INDUSTRIAL PROPERTY IN FORCE IN CROATIA

		Residents	Non-residents	Total
TRADEMARKS		8.898	14.148	23.046
	Under the Agreement			101.470
SUB-TOTAL				124.516
PATENTS		341	1.325	1.666
Consenzual patents		312	74	386
SUB-TOTAL				2.052
INDUSTRIAL DESIGNS		1009	442	1.451
	Under the Hague Agreement			1.843
SUB-TOTAL				3.294
TOTAL				129.862



REQUESTS FOR THE GRANT OF INDUSTRIAL PROPERTY FILED WITH SIPO

	1.1.1992 31.12.2008.	1.1.2009 21.1.2009.	1.1.1992 21.1.2009.		
TRADEMARKS					
Residents	16.881	57	16.938		
Non-residents	20.239	39	20.278		
Total	37.120	96	37.216		
PATENTS					
Residents	6.012	9	6.021		
Non-residents	8.622	4	8.626		
Total	14.634	13	14.647		
INDUSTRIAL DESIGNS					
Residents	3.134	13	3.147		
Non-residents	884	1	885		
Total	4.018	14	4.032		
TOTAL	55.772	123	55.895		



PATENT APPLICATIONS IN 2007 BY FIELD OF TECHNOLOGY

Field of technology	Resident applicants	Non-resident applicants	Total
Preparations for medical, dental purposes	24	20	44
Personal or domestic articles	16	7	23
Foodstuffs and tobaco	8	1	9
Transportation	39	5	44
Organic chemistry	3	16	19
Biochemistry, genetic engineering	2	4	6
Building and construction	20	0	20
Machines or engines	19	5	24
Mechanical engineering	8	1	9
Lighting and heating	13	1	14
Metrology	32	7	39
Electrical engineering	13	1	14
Others	148	24	172
Total	345	92	437



VALID PATENTS IN 2007 BY FIELD OF TECHNOLOGY

Field of technology	Resident applicants	Non-resident applicants	Total
Preparations for medical, dental purposes	35	218	253
Personal or domestic articles	31	25	56
Foodstuffs and tobaco	22	16	38
Transportation	77	73	150
Organic chemistry	32	367	399
Biochemistry, genetic engineering	4	15	19
Building and construction	65	66	131
Machines or engines	36	16	52
Mechanical engineering	13	36	49
Lighting and heating	28	12	40
Metrology	53	13	66
Electrical engineering	24	24	48
Others	150	236	386
Total	570	1117	1687



INTELLECTUAL PROPERTY - REAL FACTS

The current use of the Intellectual Property System in Croatia:

- about 100 published papers per 1 registered patent
- the private sector is more inclined to registering patents
- the public sector is more successful in publishing scientific and expert papers
- the culture of the protection of intellectual property is insufficiently developed in the Croatian academic community

What is reason for that? What to do?

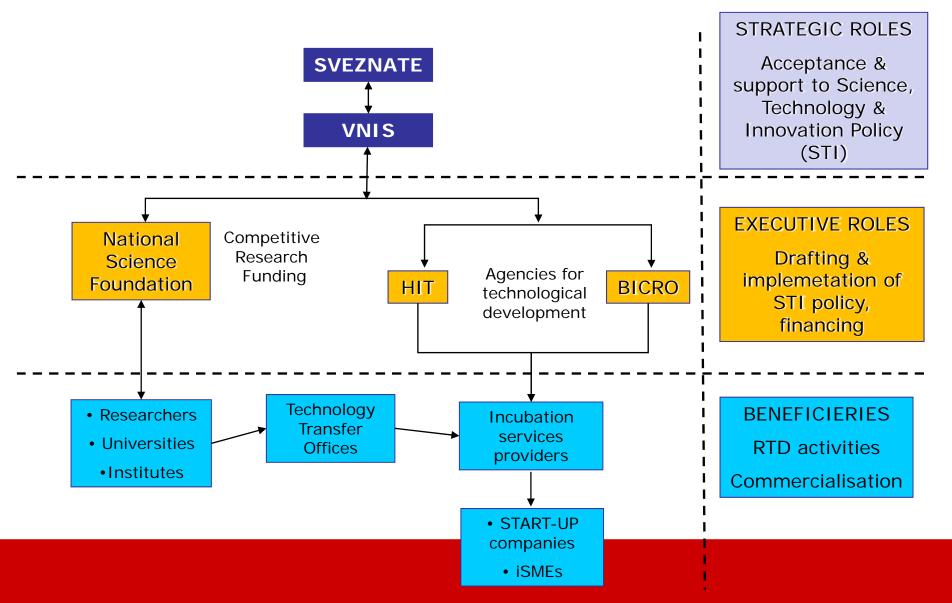


FUNDAMENTAL POSTULATES

- The Economy which is based on knowledge
- Technological revolutions are the driving force behind this
- The National Innovation System should enable efficient and effective use of tehnological revolutions for further economic development



NATIONAL INNOVATION SYSTEM FRAMEWORK





KEY ELEMENTS FOR DEVELOPMENT OF NIS

- Formulation & implementation of adequate policies & strategies
- Improvement of scientific base building on excellence
- Appropriate and adequate funding sources
- Building of business & technological infrastructure



PRIMARY ELEMENTS FOR DEVELOPMENT OF NIS

IMPLEMENTATION OF APPROPRIATE POLICIES AND STRATEGIES

OTHER PRIMARY ELEMENTS

- Political leadership
- Legislation / regulation
- Collaborations
- Public acceptance
- Market



NATIONAL INNOVATION SYSTEM

The underlying EU document for national strategies of member countries:

"Lisbon Strategy"

- Increased investments into R&D
- Achieving the goal of 3% GDP allocation at EU level
- Improving off-budget (private) and public investment ratio to 2:1

The basis objectives of the Croatian national programme for research and development:

- The increase and improvement of investments into knowledge and R&D
- Stimulation of innovation, expanding the use of information and communication technologies, and sustainable use of resources
- Knowledge-based society must strive towards realization of a healthy economy



NATIONAL STRATEGIES

Strategic document which presents a vision of the development of the Science and Technology sector in the Republic of Croatia:

"Science and Technology Policy of the Republic of Croatia 2006 - 2010"

- prepared by the Ministry of Science, Education and Sports (MSES)
- adopted by the Government of the Republic of Croatia on May 5, 2006

"Action plan for Encouraging Investment into Science and Research"

- accepted by the Government of the Republic of Croatia on 18th April 2008
- the ministry in charge of implementing the Action Plan is MSES.
- influence Croatian national policy



TECHNOLOGY POLICY

Objectives

- 1. Promotion of the establishment and development of **knowledge based companies**
- Establishment of technological infrastructure which will support small and mid-sized knowledge-based entrepreneurship and start-up technology-based companies
- 3. Stimulation of **industry demand** for research and development.
- 4. Management of intellectual property
- Diversity of sources of funding research and development, attracting investment of the private sector and creation of the industry of risk capital
- 6. Promotion of **public confidence in science** and **awareness** about the importance of innovations



NATIONAL ACTS

- In December 2005 Croatian parliament signed an Agreement with The World Bank for the Croatian Science And Technology Project (STP)
 37 million euros
- In May 2006 The Government of Croatia has defined an additional policy document Guidelines for Supporting Innovation Technology System, with the purpose of implementation of programmes under BICRO and HIT
- Since February 5th 2007, we have open call for projects under all BICRO programmes



BICRO'S TECHNOLOGY PROGRAMMES

- RAZUM programme SEED FINANCING
 - Provides for initial financing of the development of new product, service or process in newly established or existing knowledge based micro, small and mid-size companies and stimulation for industry research and development.
- TEHCRO programme INFRASTRUCTURE
 Grant support for creation of technology incubators, commercial R&D centers, science & technology parks linked to research/academic institutions and R&D-based industry
- VENCRO VENTURE CAPITAL
 Launched in order to develop the market of risk capital and attract VCs to Croatia
- IRCRO programme SPONSORED R&D
 Funds joint projects between SMEs and scientific groups in order to encourage cross-sector cooperation
- KONCRO programme INCREASED COMPETITIVNESS
 Access to expertise and consultancy services to technology businesses for solving productivity issues and upgrading their capacity



Programme	Applications (#)	Funded projects (#)	Total value of funded projects	BICRO's share of funding in projects	Programme budget 2007-2009
old RAZUM	130	36	28.969.434	17.194.178	N/A
new RAZUM	40	13	13.096.411	8.701.090	8.500.000
TEHCRO	14	9	16.558.636	5.920.411	7.900.000
IRCRO	15	6	877.715	424.385	1.500.000
KONCRO	70	32	395.132	191.557	310.000



THANK YOU!

www.bicro.hr

Planinska 1, Zagreb

razum@bicro.hr

tehcro@bicro.hr

vencro@bicro.hr

ircro@bicro.hr

koncro@bicro.hr