## THE NATIONAL INNOVATION SYSTEM AND TECHNOLOGY PROGRAMMES

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## 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?


## I NTELLECTUAL 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

## I NTELLECTUAL PROPERTY

## "National Strategy for Development of the I ntellectual 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 | Under the Agreement | 8.898 | 14.148 | 23.046 |
|  |  |  |  | 101.470 |
| SUB-TOTAL |  | 341 | 1.325 | 1.666 |
| PATENTS <br> Consenzual patents |  | 312 | 74 | 386 |
| SUB-TOTAL |  | 1009 | $\mathbf{2 . 0 5 2}$ |  |
| I NDUSTRI AL <br> DESI GNS |  |  | 442 | 1.451 |
| SUB-TOTAL |  |  |  | 1.843 |
| TOTAL |  |  |  | $\mathbf{3 . 2 9 4}$ |

[^0]
## REQUESTS FOR THE GRANT OF INDUSTRI AL PROPERTY FILED WITH SIPO

|  | $\begin{gathered} \text { 1.1.1992.- } \\ \text { 31.12.2008. } \end{gathered}$ | $\begin{aligned} & \text { 1.1.2009.- } \\ & \text { 21.1.2009. } \end{aligned}$ | $\begin{aligned} & \text { 1.1.1992.- } \\ & \text { 21.1.2009. } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 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 |
| I NDUSTRI AL DESI GNS |  |  |  |
| Residents | 3.134 | 13 | 3.147 |
| Non-residents | 884 | 1 | 885 |
| Total | 4.018 | 14 | 4.032 |
| TOTAL | 55.772 | 123 | 55.895 |

[^1]PATENT APPLI CATI ONS I N 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 |

[^2]
## VALID PATENTS IN 2007 BY FIELD OF TECHNOLOGY

| Field of technology | Resident <br> applicants | Non-resident <br> 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 | 16 | 131 |
| Machines or engines | 36 | 36 | 52 |
| Mechanical engineering | 13 | 12 | 49 |
| Lighting and heating | 28 | 24 | 66 |
| Metrology | 24 | $\mathbf{2 3 6}$ | 48 |
| Electrical engineering | $\mathbf{1 5 0}$ | $\mathbf{1 1 1 7}$ | $\mathbf{1 6 8 7}$ |
| Others | $\mathbf{5 7 0}$ |  |  |
| Total |  |  | 286 |

[^3]
## I NTELLECTUAL 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


## NATI ONAL I NNOVATI ON 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

PRI MARY ELEMENTS FOR DEVELOPMENT OF NIS

## I MPLEMENTATI ON OF APPROPRI ATE POLI CI ES AND STRATEGIES

## OTHER PRI MARY ELEMENTS

$\square$ Political leadership
$\square$ Legislation / regulation
$\square$ Collaborations
$\square$ Public acceptance

- Market

[^4]
## NATI ONAL I NNOVATI ON 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


## NATI ONAL 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 I nvestment into Science and Research"
- accepted by the Government of the Republic of Croatia on $18^{\text {th }}$ April 2008
- the ministry in charge of implementing the Action Plan is MSES
- influence Croatian national policy


## TECHNOLOGY POLI CY

Objectives

1. Promotion of the establishment and development of knowledge based companies
2. 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
5. 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

## NATI ONAL 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 FI NANCI NG

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 - I NCREASED COMPETITI VNESS

Access to expertise and consultancy services to technology businesses for solving productivity issues and upgrading their capacity

| Programme | Applications <br> $(\#)$ | Funded <br> projects <br> $(\#)$ | Total value <br> of funded <br> projects | BICRO's share <br> of funding <br> in projects | Programme <br> budget <br> $2007-2009$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 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 |
| I RCRO | 15 | 6 | 877.715 | 424.385 | 1.500 .000 |
| KONCRO | 70 | 32 | 395.132 | 191.557 | 310.000 |

[^5]
## THANK YOU!

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[^0]:    "Contribution of RTD to Developing Sustainable Knowledge-Based Economies in Central and SEE", 22-23 May 2009 Dubrovnik

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[^3]:    "Contribution of RTD to Developing Sustainable Knowledge-Based Economies in Central and SEE", 22-23 May 2009 Dubrovnik

[^4]:    "Contribution of RTD to Developing Sustainable Knowledge-Based Economies in Central and SEE", 22-23 May 2009 Dubrovnik

[^5]:    "Contribution of RTD to Developing Sustainable Knowledge-Based Economies in Central and SEE", 22-23 May 2009 Dubrovnik

