

*FURTHERANCE OF BOLOGNA PROMOTION IN CROATIA
OSIJEK, 9/3/2007*

Technology transfer at Innovative and Entrepreneurial University

Transter tehnologije na inovativnom i poduzetnom sveučilištu

Prof.dr.sc. Ivan Štefanić

Technology Development Centre Osijek Ltd.

Josip Juraj Strossmayer University of Osijek





Sveučilište Josipa Jurja
Strossmayera u Osijeku



Županija osječko-baranjska



Grad Osijek



republika hrvatska ■ republic of croatia

ministarstvo znanosti, obrazovanja i športa ■ ministry of science, education and sports

Major Tasks

- Technology transfer & commercialization of publicly funded researches
- Incubation of technology based enterprises
- Business counselling for local government and businesses
- Life Long Learning for entrepreneurs and scientists (in technology, economics, QM, IP MGMT)

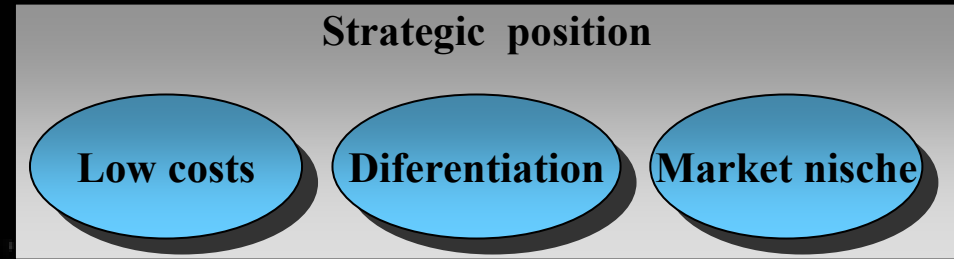


Major Tasks – output

- Transformation of innovative entrepreneurial project into successful businesses
- Creation of new jobs (qualitative & quantitative)
- Supporting networking and formation of clusters among innovative SME's



Establishing competitive advantage through assisted technology transfer



**IT TAKES TIME TO BUILD
SUCCESSFUL TTO!**

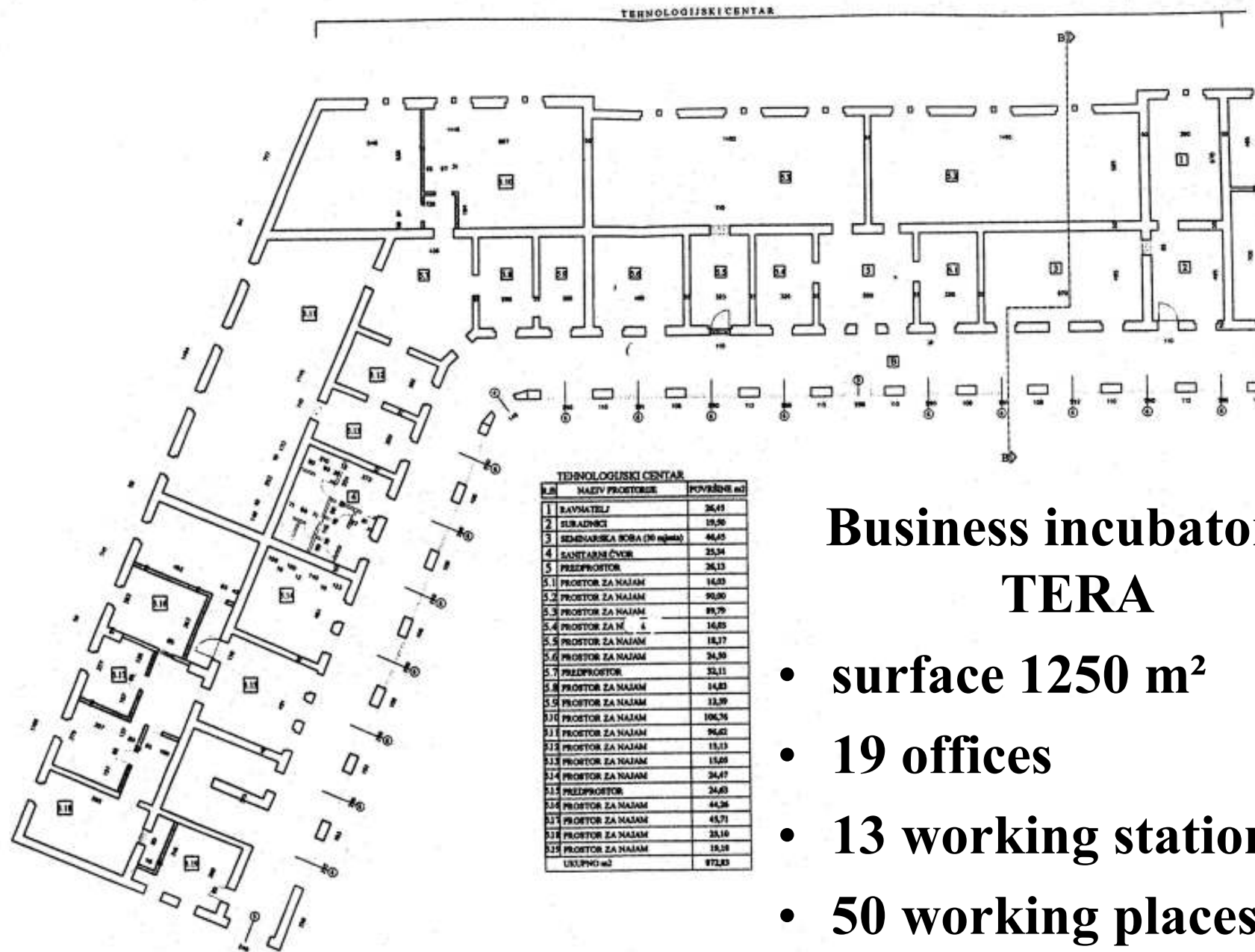


- 4/1999 Formation of team 'TERA'
- 5/2001 Stakeholder agreement signed
- 8/2002 Registration of the company
- 9/2002 First contract
- 10/2002 Start in temporary offices / Trg Lava Mirskog 1
- 10/2002 Renvation of permanent premises (start)
- 5/2003 First tenents / opening of the first phase
- 2/2007 Largest & most comprehensive regional centre in Croatia
- 3/2007 Plan for Technology park Osijek
- 3/2009 Technology park Osijek opened
- 3/2010 >5000m², >50% selfsustainable,
~100 incubated companies, >500 jobs



THRA PREMISES





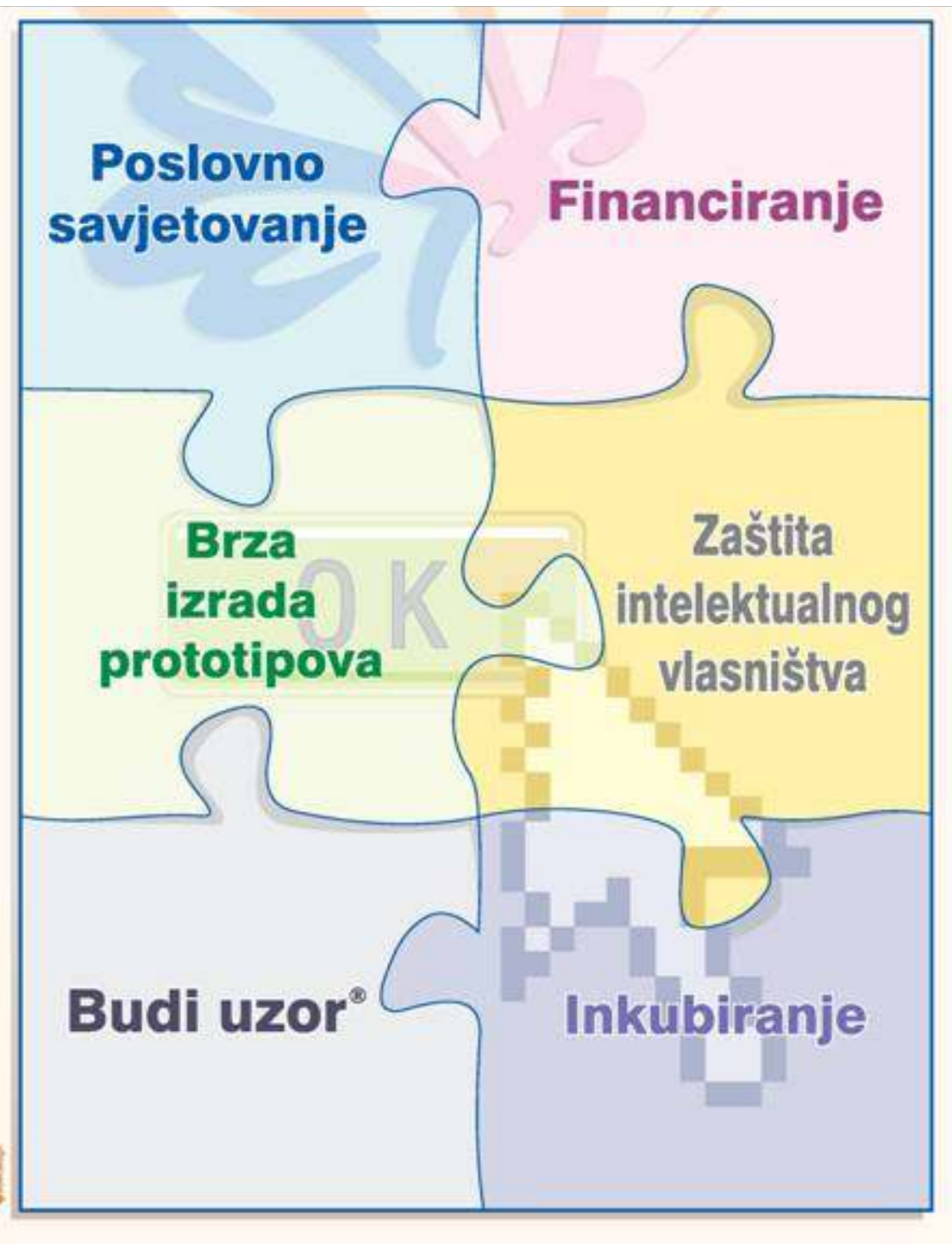
Business incubator TERA

- surface 1250 m²
- 19 offices
- 13 working stations
- 50 working places

A photograph of an office space during a renovation project. The room features several wooden desks with black office chairs. A large window on the left side is covered with white vertical blinds. The floor is made of polished wood in a herringbone pattern. The ceiling has recessed lighting fixtures. The word "Renovation?" is overlaid in the center of the image.

Renovation?

TERA PORTFOLIO



Activities of business incubator

1. BASIC SERVICES

2. GENERAL SERVICES

3. ADDITIONAL SERVICES

4. FINANCIAL SERVICES



BASIC SERVICES

- Furnished & non- offices (15 -100 m²)
- Common areas (meeting rooms, toilets)
- Reception & administrative services)
- Mail
- Parking
- Security & confidentiality
- Maintenance
- Cleaning
- All that “easy in – easy out”

GENERAL SERVICES

- Water & electricity supply
- Heating & AC
- Telephone & intranet
- Telefaks
- Photokopying & binding
- Videoconferences
- Caffeteria



ADDITIONAL SERVICES

- Tax & administrative counseling
- Match making
- Marketing research & plans
- Education (LLL)
- Business planning
- Networking & i B2B
- Access to national & international finances



FINANCIAL SERVICES



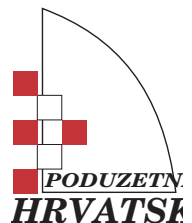

- RAZUM
- Programs MINGORP/MPŠVG/HBOR
- VENCRO
- IRCRO
- KONCRO
- Mikro-kreditni za poticanje osnivanja poduzeća
- ANGEL INVESTORS



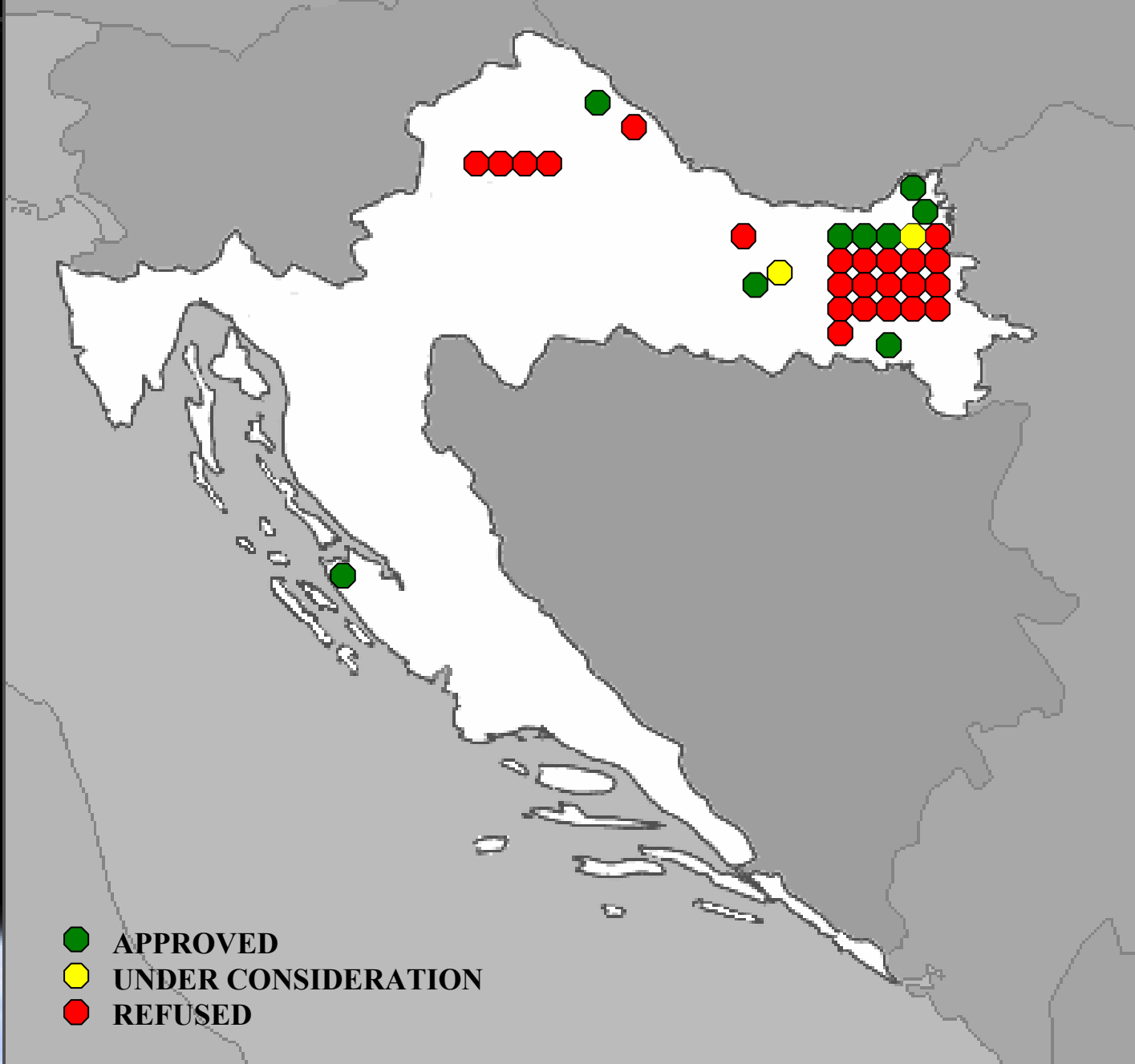
Advantages to tenants

- Minimal fix costs
- Easy access to knowledge & technologies
- Reduced risk
- Image & communication
- Business synergy through networking
- Faster constitution & growth



	<p>DEMO INFORMATIKA D.O.O.</p>	 <small>Hrvatska banka za obnovu i razvitak</small>	<p><i>KANTINA ROBI</i></p>	 <small>od inovativne ideje do profitabilnog poduzeća www.tera.hr</small>
	<p>greenstudio www.greenstudio.org</p>	<p><i>2EM</i></p>	<p>Alpha Score d.o.o</p>	<p>I PRO d.o.o.</p>
<p><i>KIČenDIZAJN obrt</i></p>	<p><i><u>Eventus</u></i></p>	<p>Uredi ovlaštenih arhitekata VRBAN ANDRAŠIĆ MAJDANDŽIĆ</p>	<p>INOVATIVO</p>	<p>GGT D.O.O. Gorea Genotipizacija</p>
	<p><i>In Extremis</i></p>	<p>KONCERT</p>		
<p><u>NEOS</u></p>	<p>VOBIS D.O O. ERDUT D.O.O.</p>	<p>CIPHER WE ONLY DO SOFTWARE</p>	<p>Poliedar d.o.o.</p>	<p>BIZ DIREKT</p>

TERA OSIJEK Ltd. in RAZUM 2001-2006



PLAYGROUND



THE EUROPEAN HIGHER EDUCATION AREA

- Adoption of a system of easily readable and comparable degrees
- Adoption of a system essentially based on two main cycles: undergraduate and graduate
- Establishment of a system of credits
- Promotion of mobility
- Promotion of European co-operation in quality assurance

- **INCREASING THE
INTERNATIONAL COMPETITIVENESS**

Source:http://www.bologna-berlin2003.de/pdf/bologna_declaration.pdf (online,5/3/2007)

EUROPEAN RESEARCH AREA

**ERA has been described by the Commission as
“pivotal to securing Europe’s economic and
competitive future”.**

LISBON AGENDA (March 2000)

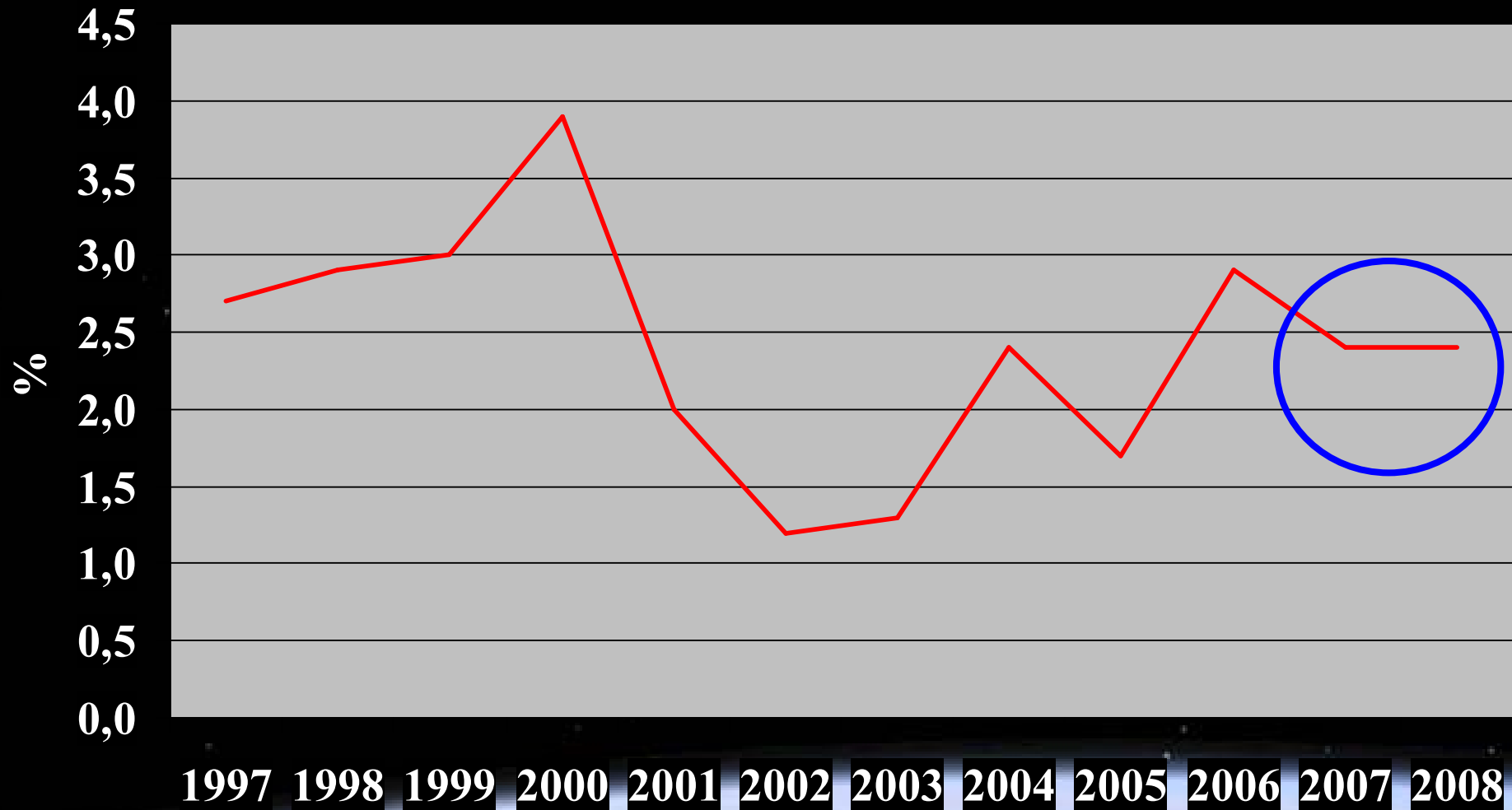
- European Union set the goal of becoming "the most dynamic and competitive knowledge-based economy in the world" by 2010.
- They set the target of achieving 3% average economic growth and the creation of 20 million jobs by 2010. The agenda set out the way to achieve this with a series of goals in areas such as employment, innovation, enterprise, liberalisation and the environment.

EUROZONE GDP GROWTH



SOURCE: Eurostat

REAL GDP GROWTH

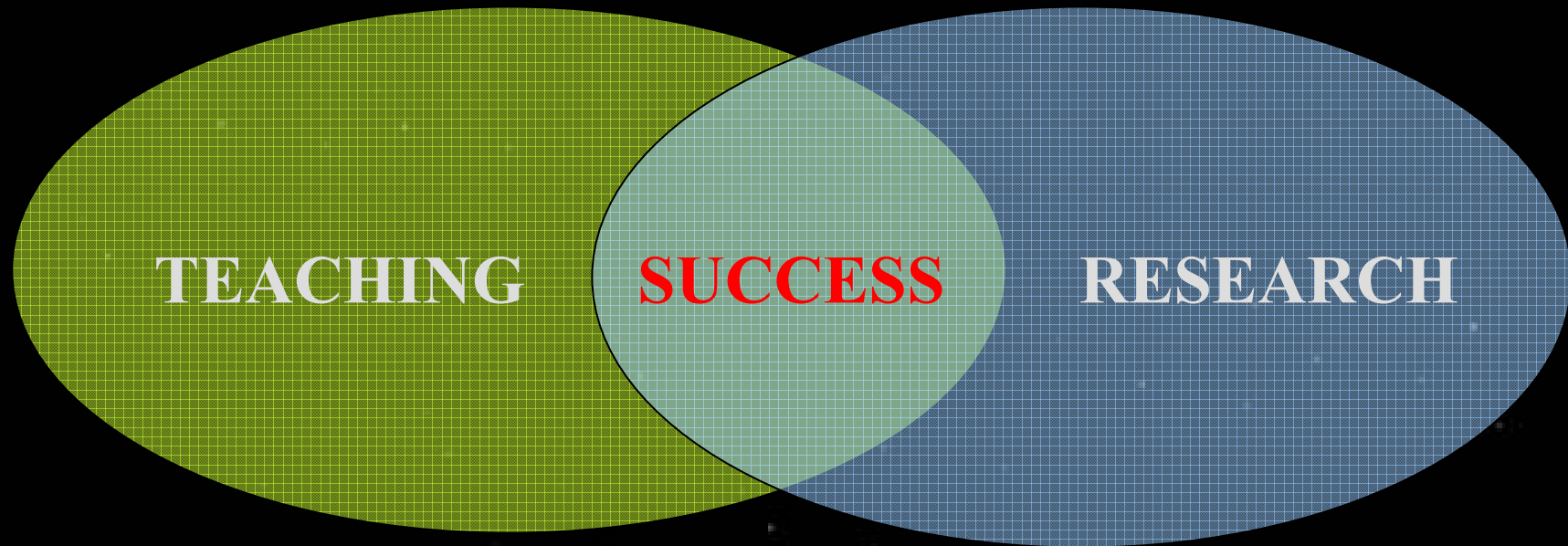


— EU 25

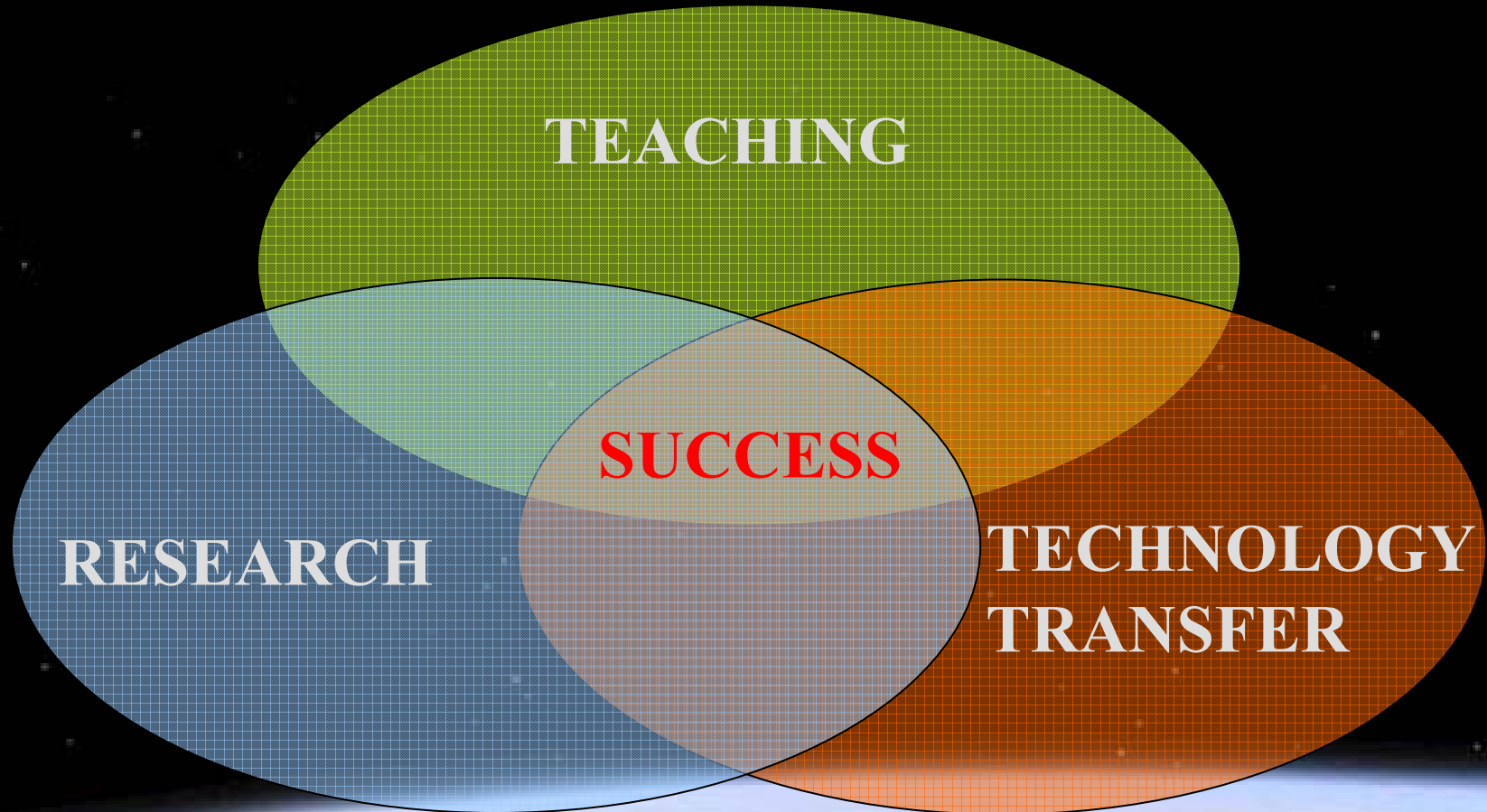
(2007- EU 27 forecast)

Source: EUROSTAT

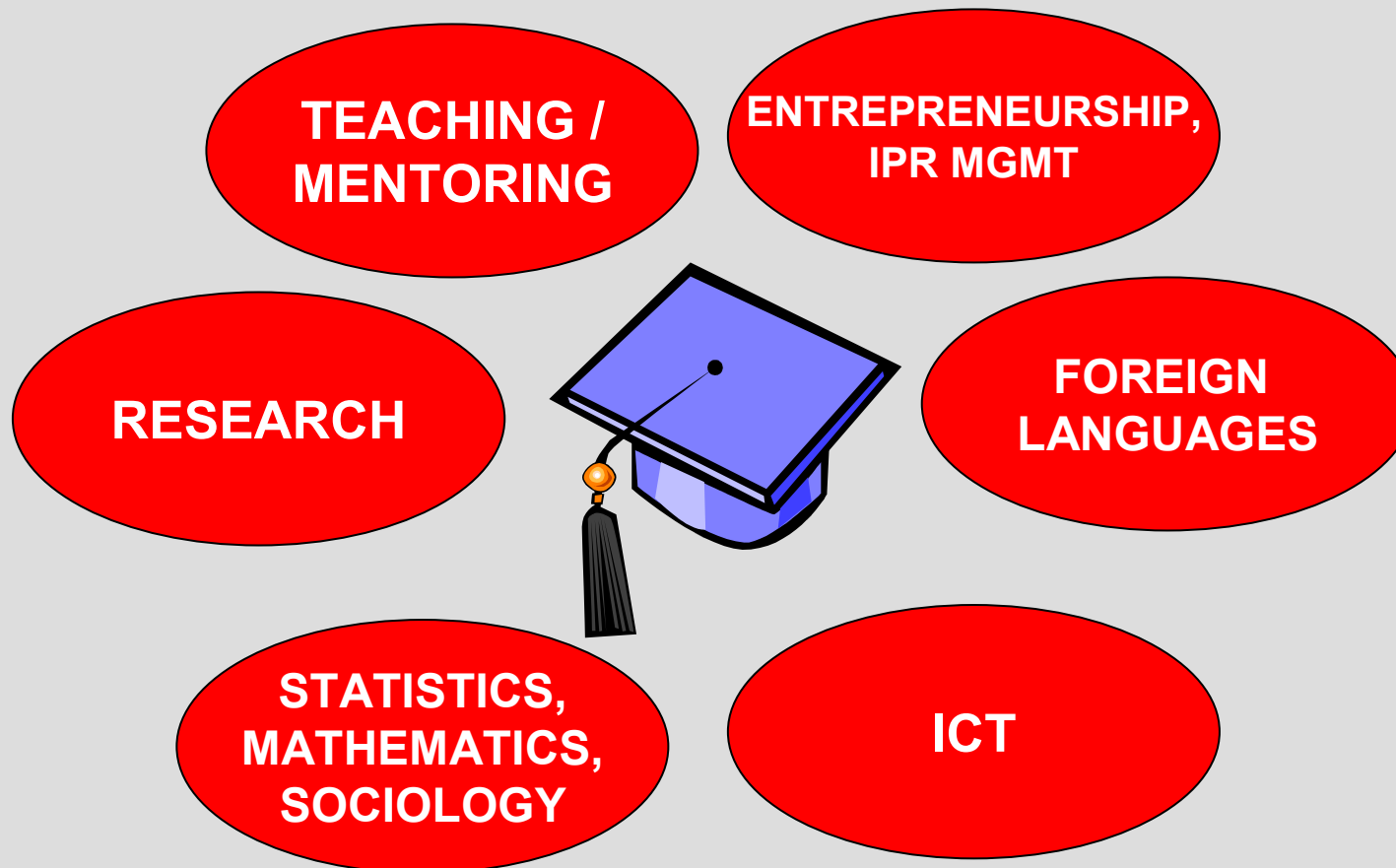
TRADITIONAL UNIVERSITY FUNDING



THREE STREAM FUNDING



KNOWLEDGE NECESSARY FOR SUCCESSFUL UNIVERSITY EMPLOYEE



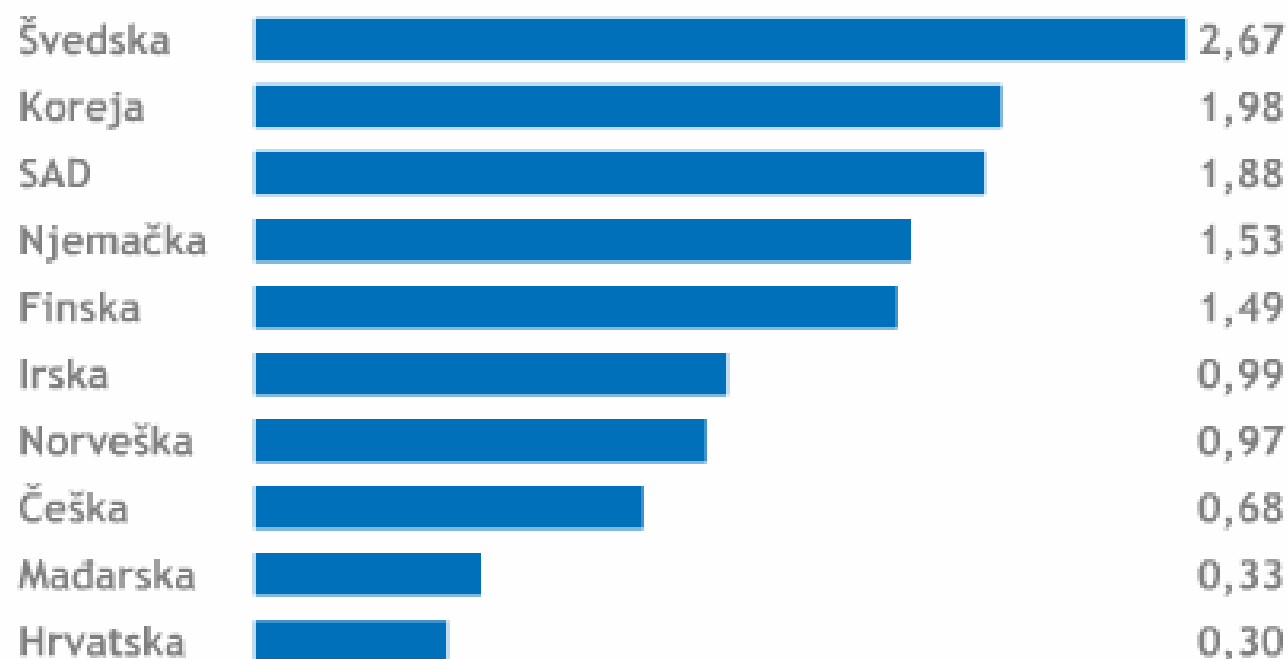
PRESENT SITUATION IN CROATIA



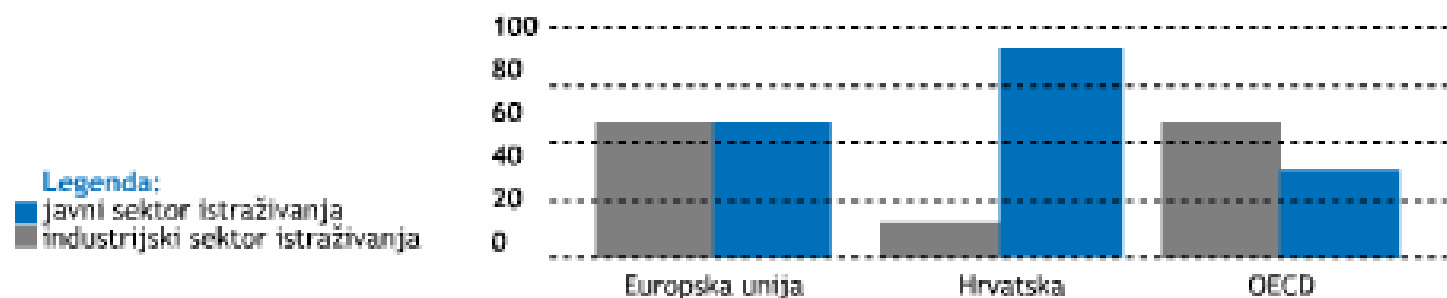
VEĆA ULAGANJA U RAZVOJNA, INDUSTRIJSKA, GOSPODARSKA ISTRAŽIVANJA

U Hrvatskoj se nedovoljno ulaže u industrijska, gospodarska istraživanja.

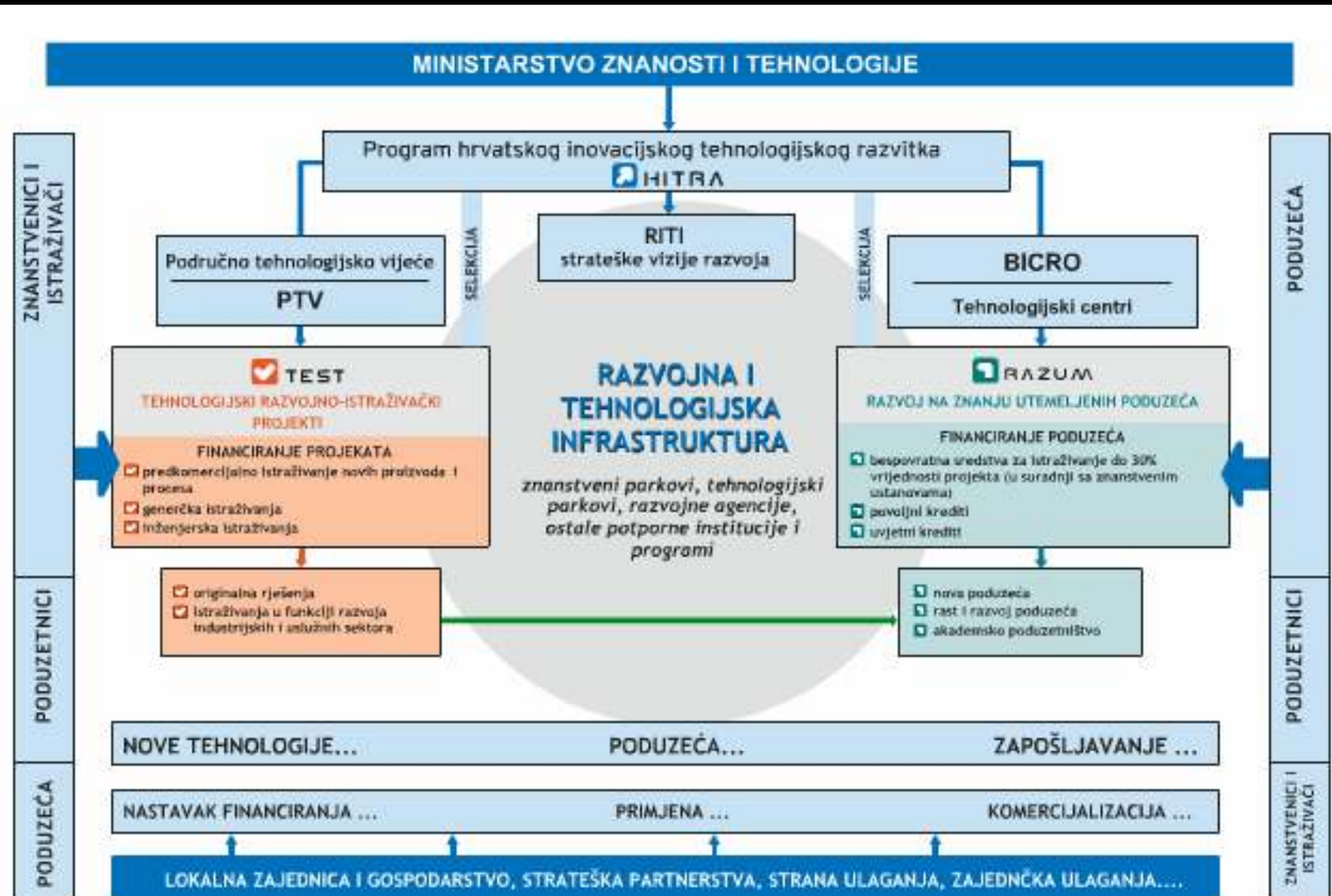
Ulaganja poslovnog sektora u istraživanje i razvoj (% od BDP-a)



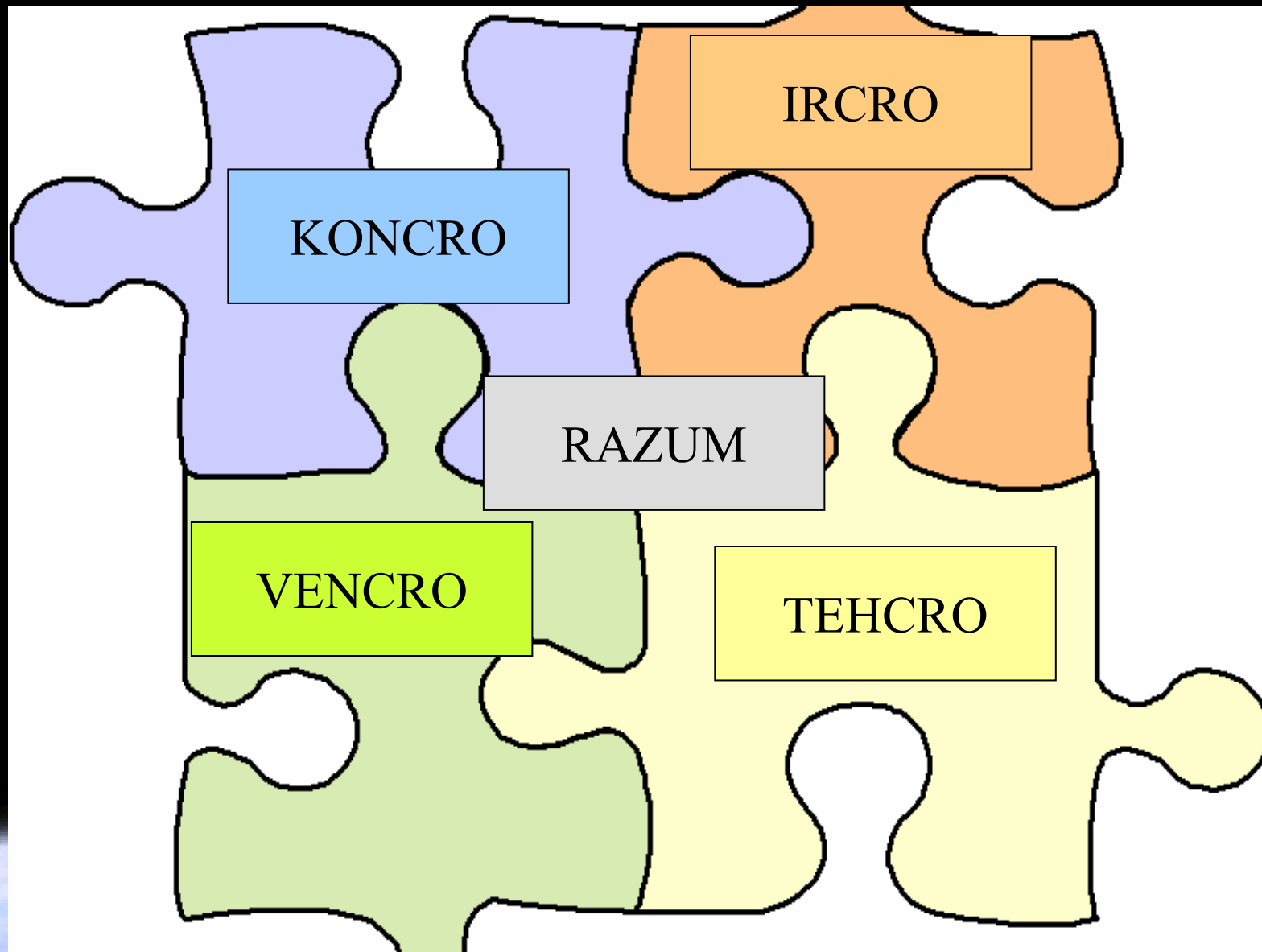
Odnos broja istraživača po zemljama i sektorima u postotku



Croatian Innovation Technology Development 2001-2006



CROATIAN INNOVATION & TECHNOLOGY DEVELOPMENT IN 2007.



NEW TERA PROGRAMS

- Program “FOKUS” preincubation on working stations in TERA preincubator
- Program “BE THE ROLE MODEL[®]”
 - Exhibition of innovations, prototypes with medals award
 - Competition in writing “Best business plan for technology based enterprise” for students & staff
- To recruit new tenants & clients





MISSING!

- CROATIAN AGENDA (vs. LISBON AGENDA)
- NATIONAL IP STRATEGY
- CROATIAN BAYH-DOLE ACT
- MODEL REVENUE DISTRIBUTION
- ...
- **TERA IS READY TO ACT AS TTO**



CROATIAN AGENDA

- to become the part of "the most dynamic and competitive knowledge-based economy in the world" by 2010.
- Target is achieving 6% average economic growth and the creation of 200.000 jobs by 2010 with a series of goals in areas such as employment, innovation, enterprise, liberalisation and the environment.



- 1980-1998
- USA
- +29M high paying jobs mostly in new industries
- $+29M = -44M + 73M$
- EU (1/3 larger population)
- +4M ...in public sector
- $+4M = -0M + 4M$
- HR 2007-2010
- $+200k = -200k + 400k$

NATIONAL STRATEGY

- RESULTS OF PUBLICLY FUNDED RESEARCHES BELONG TO THE UNIVERSITY (CROATIAN BAYH-DOLE ACT)
- TO SUPPORT DEVELOPMENT OF KNOWLEDGE BASED ECONOMY GOVERNMENT MAINTAIN THE NETWORK OF TECHNOLOGY-DEVELOPMENT CENTRES



UNIVERSITY STRATEGY

- ALL UNIVERSITY STAFF HAVE INDIVIDUAL & FLEXIBLE APPOINTMENT (TEACHING, RESEARCH, EXTENSION)
- RESULTS OF “THIRD STREAM” ACTIVITIES ARE RECOGNIZED IN REGULAR EVALUATIONS OF SCIENTISTS



Croatian model of revenue distribution

100% University
up to recovery all costs

1st 100,000 €
75% researcher
25% University

next 250,000 €
50% researcher
25% researcher's team
25% University

next 500,000 €
40% researcher
10% researcher's team
25 % Department
25 % University

all additional income
30% researcher
10% researcher's team
25 % Department
35% University

IMPORTANT

- CONTINUITY
- SINERGY THROUGH NETWORKING



Why is so difficult?



Since 1876

- Patenting has a long tradition in Croatia.
- Patent No.4353 filed in Vienna on 12. Feb.
DUPLIX MORSE CODE CONNECTION
by Ferdinand Kovačević



UNITED STATES PATENT OFFICE.

NICOLA TESLA, OF NEW YORK, N. Y.

ELECTRIC GENERATOR.

SPECIFICATION forming part of Letters Patent No. 511,916, dated January 2, 1894.

Application filed August 13, 1893. Serial No. 455,265. (Straddle.)

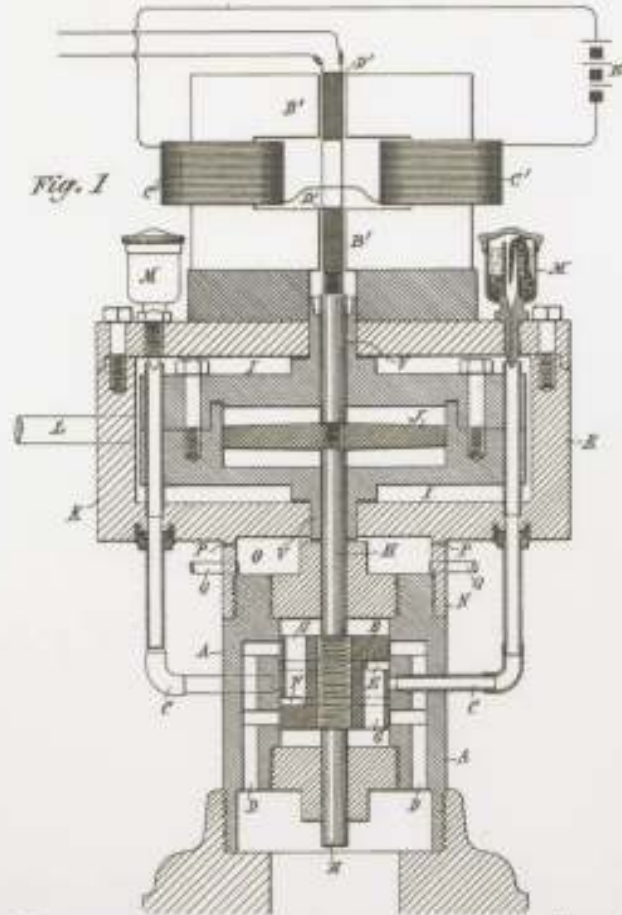
(No Model.)

2 Sheets—Sheet 1.

N. TESLA.
ELECTRIC GENERATOR.

No. 511,916.

Patented Jan. 2, 1894.



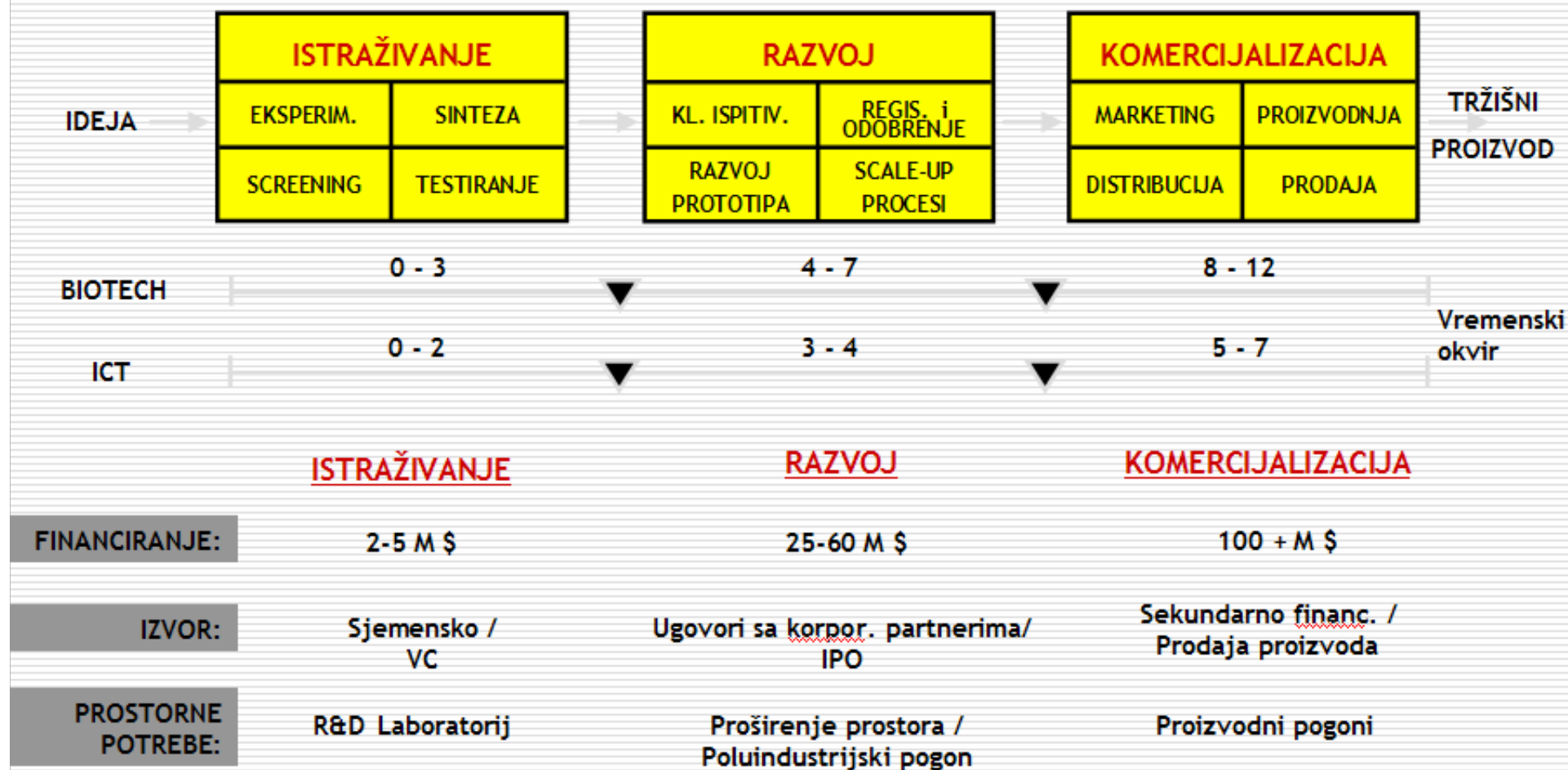
Witnesses
R. T. Gaylord

Inventor
Nicola Tesla
By Geo. S. Atkinson
Duncan & Page

Patent applications in Croatia

	2001	2002	2003	2004	2005
Applications filed by resident applicants	372	333	401	398	368
Total No. of applications	973	1037	1101	1239	1323

ŽIVOTNI CIKLUS KOMPANIJA VISOKE TEHNOLOGIJE



- Some patents are suitable to commercialize
- Some patents are not suitable , but they could prevent others to patent or come to close
- Success is rather rare
 - 5-10 % based on 9000 cases (US experience)
- Great success is even more rare
 - 1% of previously mentioned 5-10 %



Innovative approach & 5 P

- Perfect
- Preparation
- Prevent
- Patetic
- Performance



Tehnologijsko-razvojni centar u Osijeku d.o.o.
za promicanje novih tehnologija, inovacija i poduzetništva

Technology Development Centre Osijek Ltd.

**to promote new technologies, innovations and
entrepreneurship**

Gajev trg 6, 31000 Osijek

tel: (031) 251 000

fax: (031) 251 005

[http:// www.tera.hr](http://www.tera.hr)

ured@tera.hr

TERA ACT AS TTO!



TECHNOLOGY PARK OSIJEK



The World Bank: Additional criteria

Measures

Site and situation

- Availability of an appropriate site, of at least 10 hectares, in a location attractive to technology based businesses and within 5 minutes drive or 15 minutes walk of a university or major research institute

Master plan

- A master plan for the physical development of the technology park should be prepared, demonstrating the capability to create a high quality and sustainable business environment

Sponsors/partners

- Appropriate joint venture partners identified which will bring significant experience of development of science and technology parks elsewhere, and which will enable capital investment to be secured for the necessary investment in infrastructure.

Funding

- Evidence of sufficient funding to realise the plans and to create a self sufficient scheme which can continue long term to offer an attractive business environment, including premises and related services, facilities and networks, to technology based businesses.



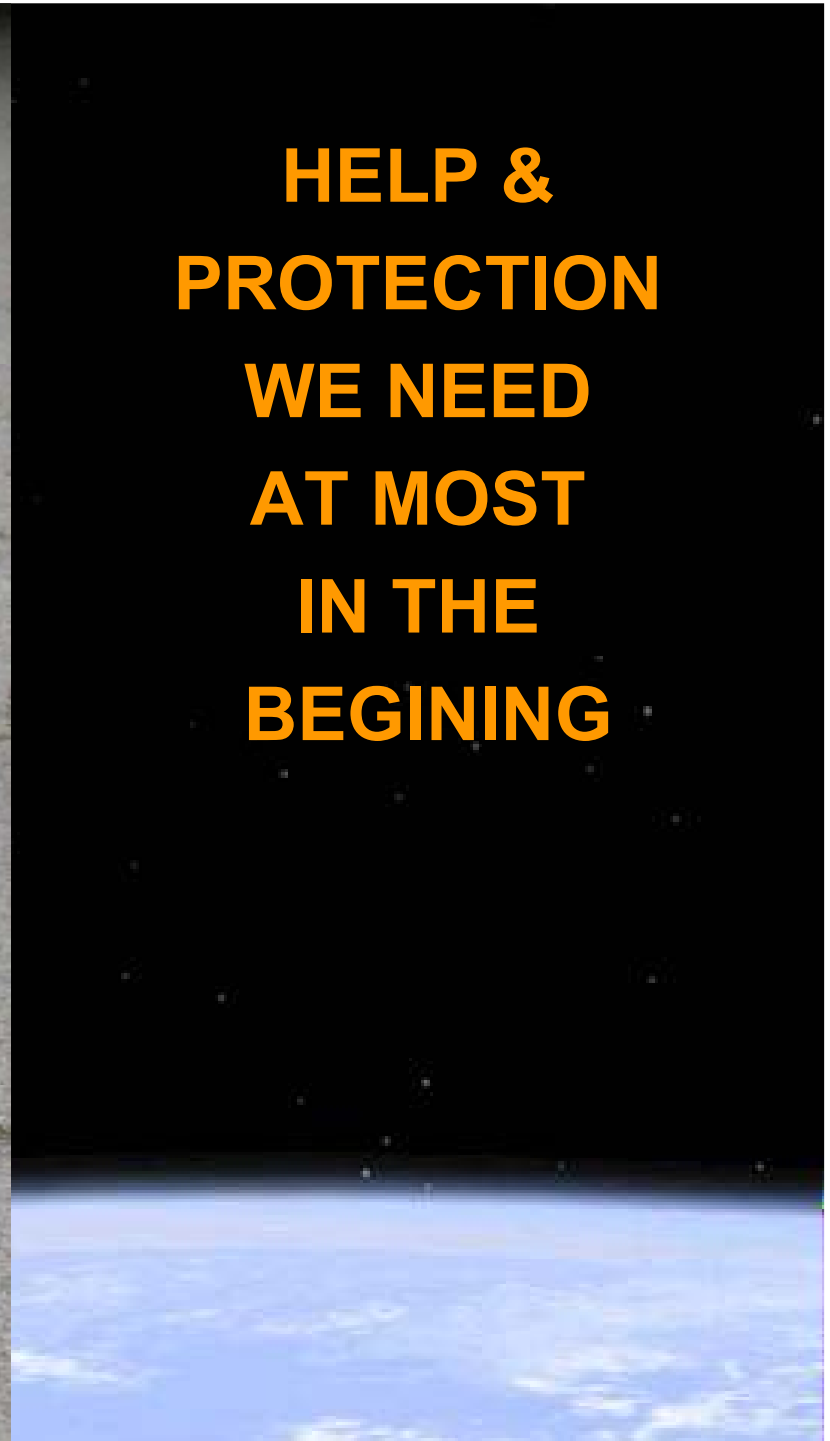


**STORY OF US
(IN 5 PICTURES)**



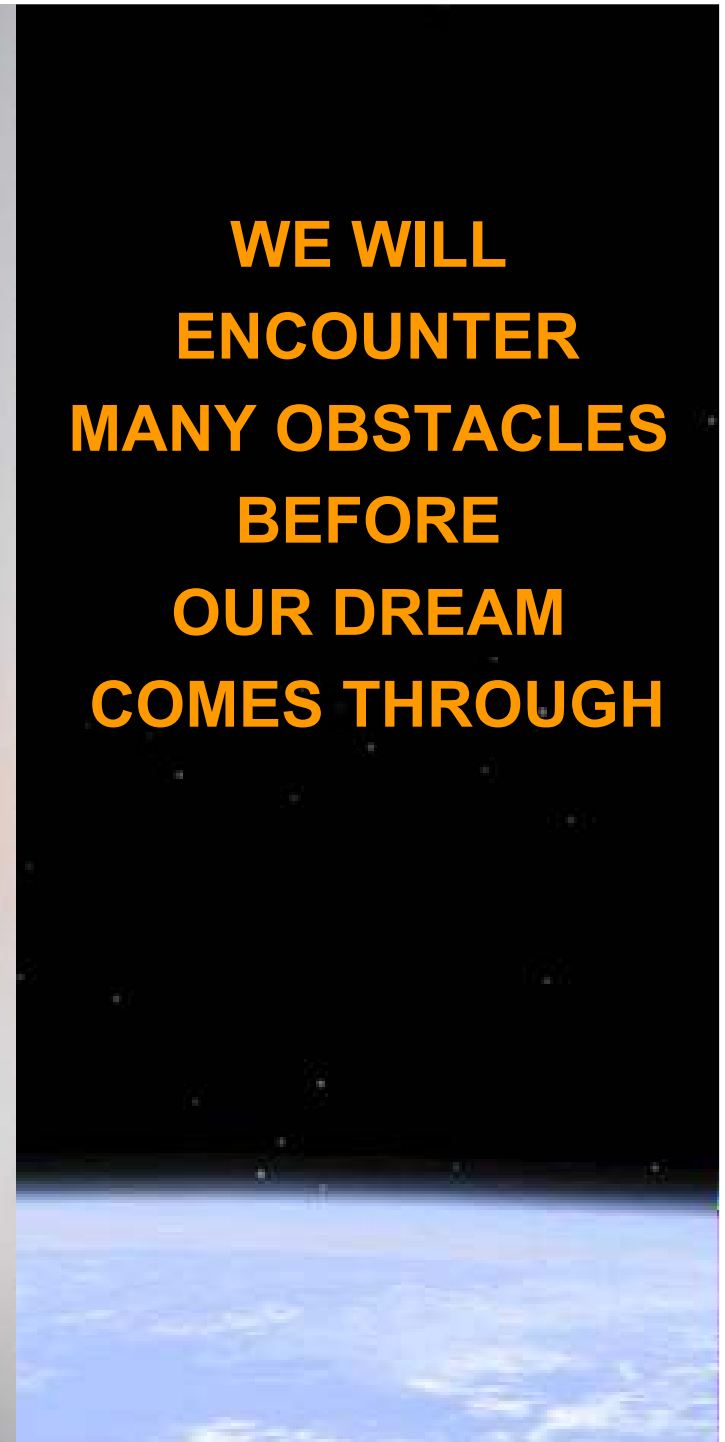


**HELP &
PROTECTION
WE NEED
AT MOST
IN THE
BEGINING**



**SUCCESSFUL
ENTERPRISE**

**WE WILL
ENCOUNTER
MANY OBSTACLES
BEFORE
OUR DREAM
COMES THROUGH**





**TEAM WORK COULD BE
THE KEY FOR SUCCESS**



**SUCCESSFUL
ENTERPRISE**

SUCCESS, THAT'S WHAT WE WANT



**COMPETITION COULD BE
CLOSER THAN WE EXPECT**

Nota Bene

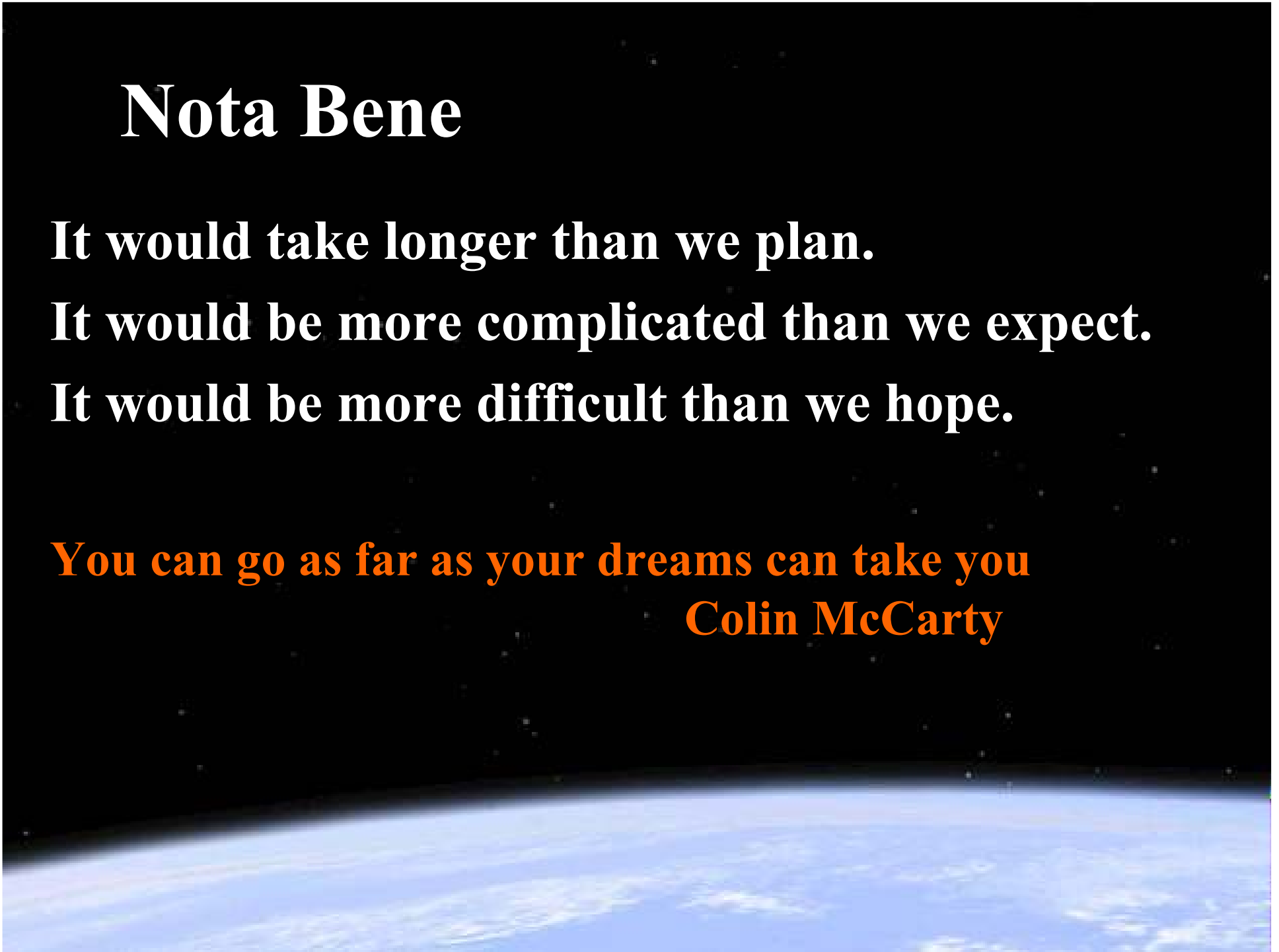
It would take longer than we plan.

It would be more complicated than we expect.

It would be more difficult than we hope.

You can go as far as your dreams can take you

Colin McCarty



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