EUA Annual Conference 2018

Engaged and responsible universities shaping Europe

Plenary II: The role of public policies driving universities' social responsibility and engagement

Stanislav Kmet

Public policies synergies together with engaged and responsible universities in Kosice shape the region

The prospects of regional partnerships are always successfully boosted by prosperous and successful regional public policies and economic circumstances.

- **Public and community engagement has always been a characteristic mission associated with universities.**

IMPORTANT

Engagement and social responsibility are not new in the mission statements of universities and are often referred to as the „third mission“ (alongside education and research).

Education

Knowledges

Learning

R&D

Graduates

Transfer of technologies

Knowledge

Solutions

Know-how

Patents

Expertises

Projects

Market – practice, guidance, courses

Third mission

IMPORTANT

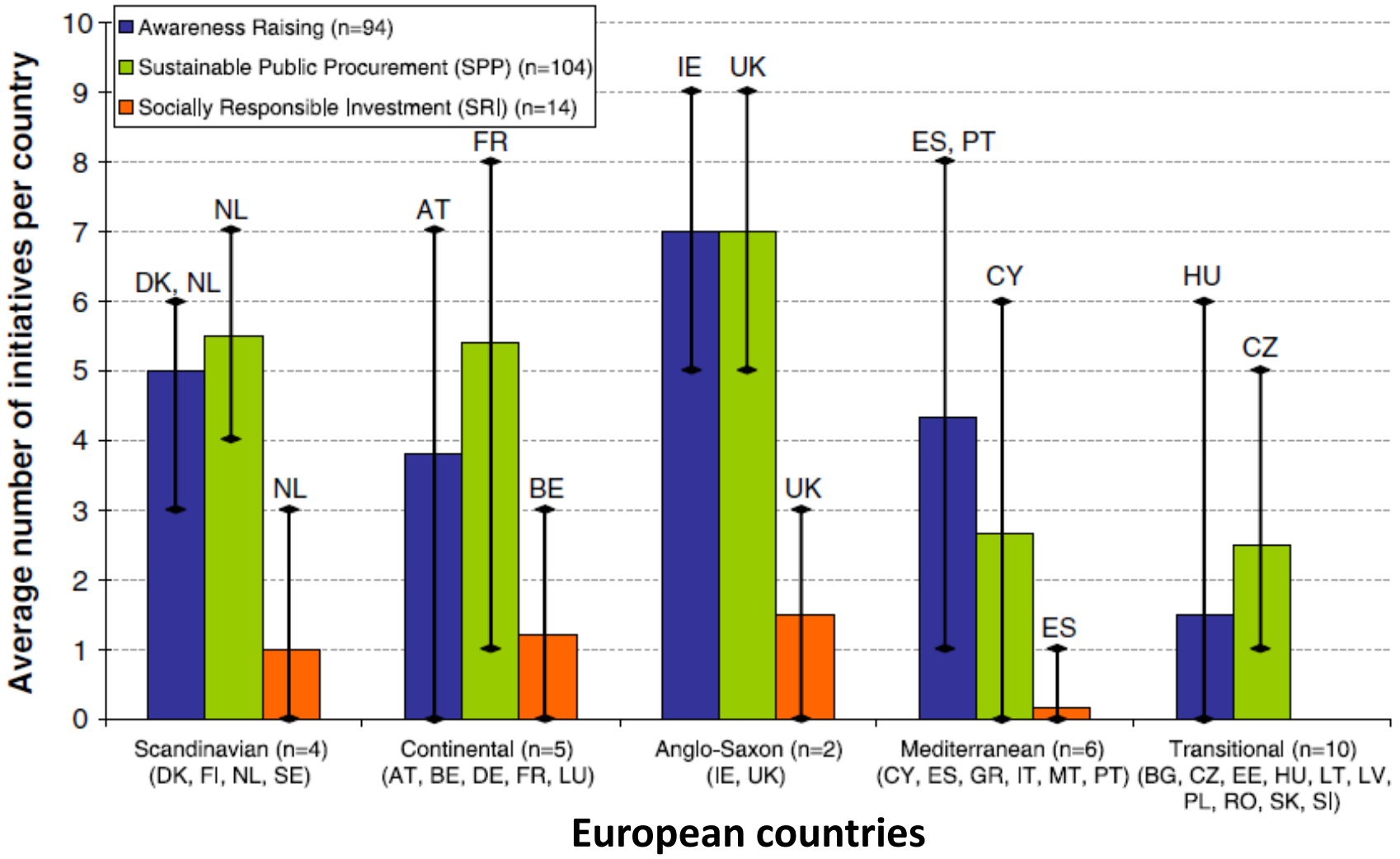
Governments, in particular in Western Europe, have become increasingly active in promoting and shaping Corporate Social Responsibility (CSR)

Following Figures show that Western European governments are significantly more active in promoting CSR than governments in CEE countries.

<u>Three indicators were compared</u>:

- **Policies Aiming to Raise Awareness of corporate social responsibility (CSR)**
- **Policies on Socially Responsible Investment and**
- **Sustainable public procurement**

Regional Differences in CSR Policies in Europe: Distribution of the 212 CSR policy initiatives across Europe



Courtesy: Steurer, R. et al.: Public Policies on CSR in Europe: Themes, Instruments and Regional Differences. In: Corporate Social responsibility and Environmental management, 19, 2012, 206-227.

Key roles for government organizations in Social Responsibilities:

- **SR public procurement**
- **Finding balance between soft and hard power (legislation vs. voluntary) to ensure social responsibility among institutions and stakeholders**
- **Creating an environment for discussion**
- **Mediation among different institutions and stakeholders (multipartite discussions)**
- **Convening**

The fields of influence for both CSR and USR policies can be characterised as follows:

- **Integrated labour markets and social inclusion „flexicurity“**
- **Skills development, lifelong learning and employability**
- **Public health**
- **Working environments that are conducive to innovation**
- **Environmental resource use and pollution**
- **Poverty reduction and human rights**

Courtesy: Genevieve Besse, *DG Employment, Social Affairs and Equal Opportunities: Promo-tion of CSR by the European Commission*

Universities and their mission, a need for innovations

- ***Universities (as derived from its Latin name „universitas magistrorum et scholarium“)***, **are degree-awarding institutions, community of teachers and scholars.**

- **Universities, as pillars for human development, are “socially responsible” towards their human product (the graduates) and their potential stakeholders who affect the future of business and society.**

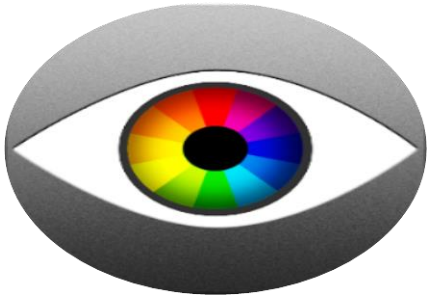
- **A traditional understanding of university as a „research, learning and teaching community“ remains the same,**

but no institution can survive and thrive without innovation.

Universities and their mission, a need for innovations

- **The growing importance of knowledge in economics and society might strengthen the importance of universities, but this is not happening automatically.**

- **<u>Dilemma:</u> „How then to preserve university spirit, functions, significance and image valid for the centuries, maintaining its role in society, while innovating and responding to a rapidly changing global world?“**



G.B. Shaw: „We are made wise not by the recollection of our past, but by the responsibility for our future ”.

As mentioned above, a new (minimum) paradigm for USR could include the following elements:

- **Ethically grounded research**
- **Teaching based on educational aims founded on critical reflection, values and knowledge including traditional wisdom and indigenous knowledge (not only skills and competences)**
- **A social dimension towards students (access in accordance with the ability to achieve equity) and staff (e.g. gender issues); and**
- **The inclusion of national and international dimensions.**

In developing this paradigm, universities in (our) countries should reflect on the entire education process, from early childhood education to lifelong learning.

Courtesy: UNIVERSITIES AND THEIR SOCIAL RESPONSIBILITIES, 2nd Asia-Europe Education Workshop, 5 - 7 June 2011, Innsbruck, Austria

Universities and their mission, a need for innovations

In the practice of USR, the need for the following arise:

- **A clear model and engagement principles (especially on the trade-off between excellence and social responsibility or ability and social support);**
- **A governance system;**
- **Sustainable strategies grounded in evidence-based research (today, they are on an ad hoc basis); and**
- **A reward system, for both students and staff (to initiate and promote volunteering as part of learning and help).**

Courtesy: UNIVERSITIES AND THEIR SOCIAL RESPONSIBILITIES, 2nd Asia-Europe Education Workshop, 5 - 7 June 2011, Innsbruck, Austria

Cooperation

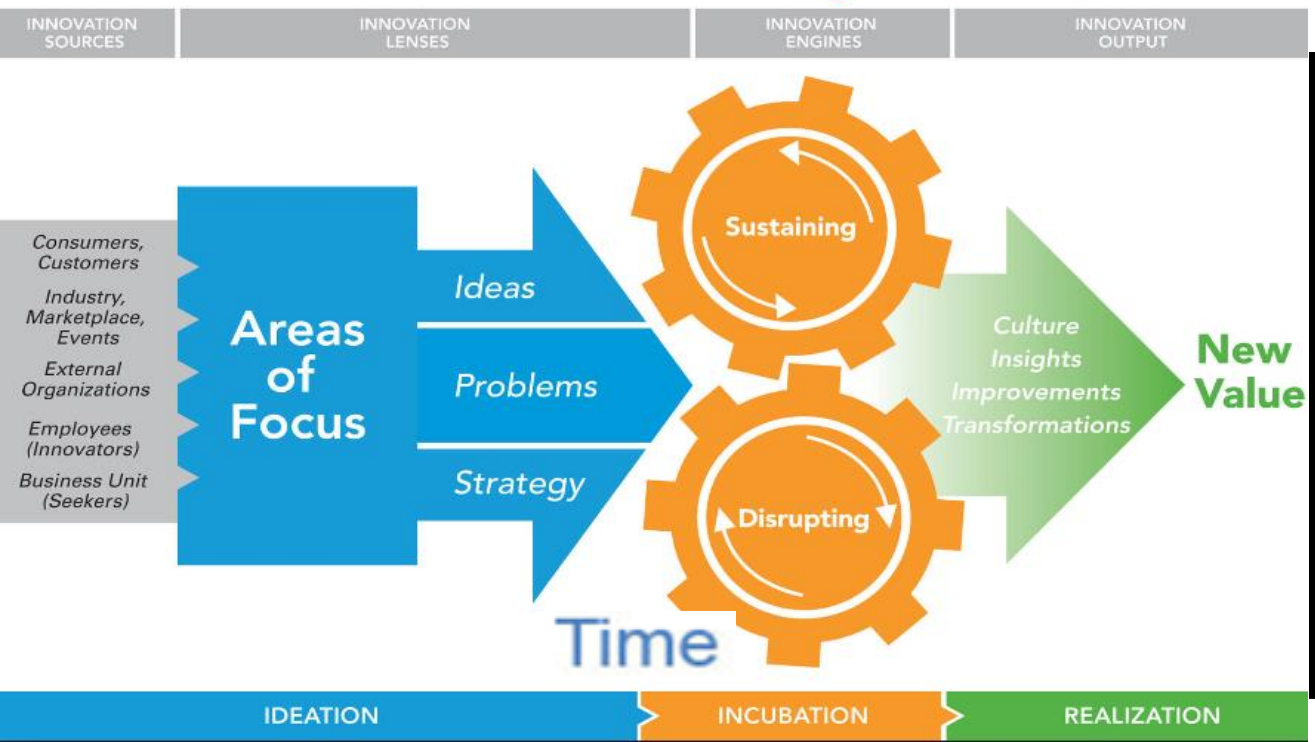
INSTITUTE OF MATERIALS RESEARCH

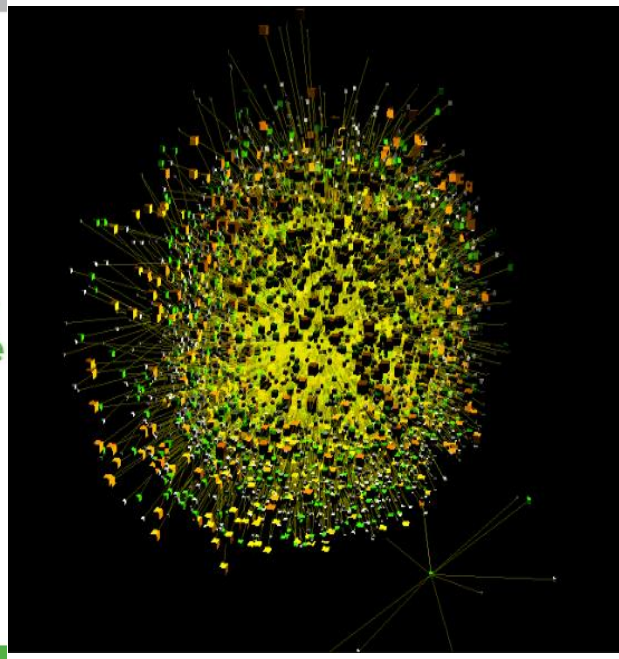
KOŠICKÝ SAMOSPRÁVNY KRAJ
plný inšpirácie

KOŠICE

RIS of Košice Region 2016 +

Regional Innovation Strategy *in accordance with* National and Regional Research and Innovation Strategy for Smart Specialisation





Vision of Regional Innovation Strategy (RIS) 2016+

Košice region economically grows and has a developed innovation platform and open collaboration in research, development and innovations

Measurable indicators:

Economic performance of the region, **investments in research and development**, the number of innovative companies, **number of start-ups**, the number of scientific and engineering personnel, **the number of excellent research workplaces**, **university science parks**, technology and competence centers, number of patents, **the share of goods and services with higher added value**, the share of goods and services with greater added value for export

Regional innovation ecosystems at the European level

Mission

By means of the mutual cooperation of all stakeholders using internal innovation potential and available financial resources to achieve prosperity of the Košice region

Pillars of RIS 2016+

- **Excellence in research and development**
- **Commercialization of research and innovation**
- **Support of innovative business and promising sectors**
- **Quality human resources for increased innovation performance of the region**

PAVOL JOZEF ŠAFÁRIK UNIVERSITY IN KOŠICE

UNIVESITY OF VETERINARY MEDICINE AND PHARMACY IN KOŠICE

SLOVAK ACADEMY OF SCIENCES

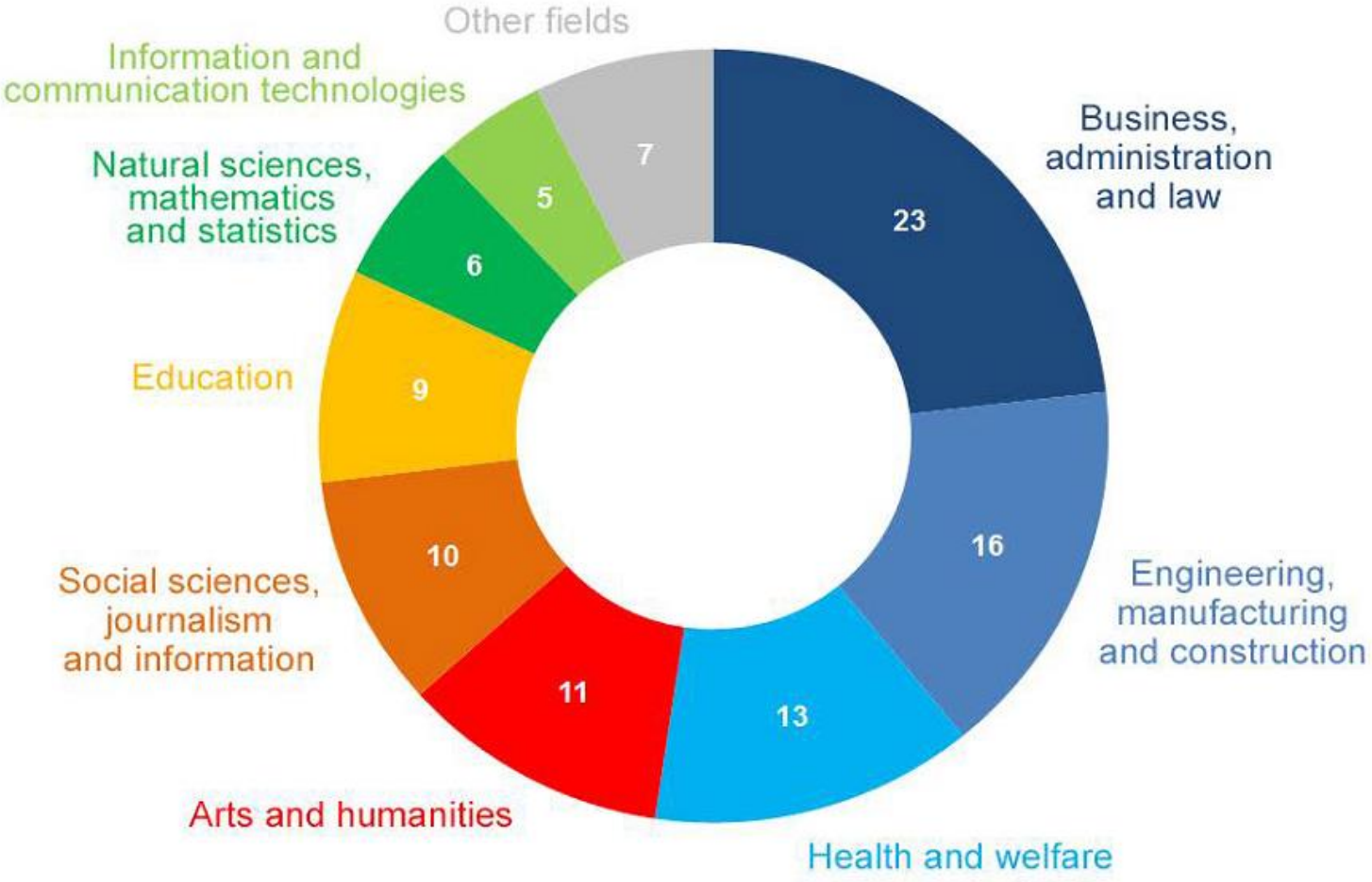
Technical University of Košice

KOŠICE'S
INNOVATION
DISTRICT
TECHNICOM
Technická univerzita v Košiciach a ÚCITT
Klaster IT Valley
CEIT
TABAČKA
KSK
KUNSTHALLE
IEP SAS
Eastcubator
INSTITUTE OF MATERIALS RESEARCH
Mesto Košice
HALMI space
Univerzita Pavla Jozefa Šafárika v Košiciach
Podnikovohospodárska fakulta
Kasárne KULTURPARK
ZTS VVÚ a Klaster AT+R
SAV
EAST BOSTON
BEACON HILL
DOWNTOWN
boston harbor
boston common
Louis Boston
ICA
BOA Pavillion
Harpoon Brewery
BCEC
Boston Design Center
SOUTH STATION
FORT POINT
15 min. walk
10 minutes to LOGAN INTERNATIONAL AIRPORT
CHINATOWN
SOUTH BOSTON
I-90
I-93
BOSTON'S
INNOVATION
DISTRICT

What do young adults study?

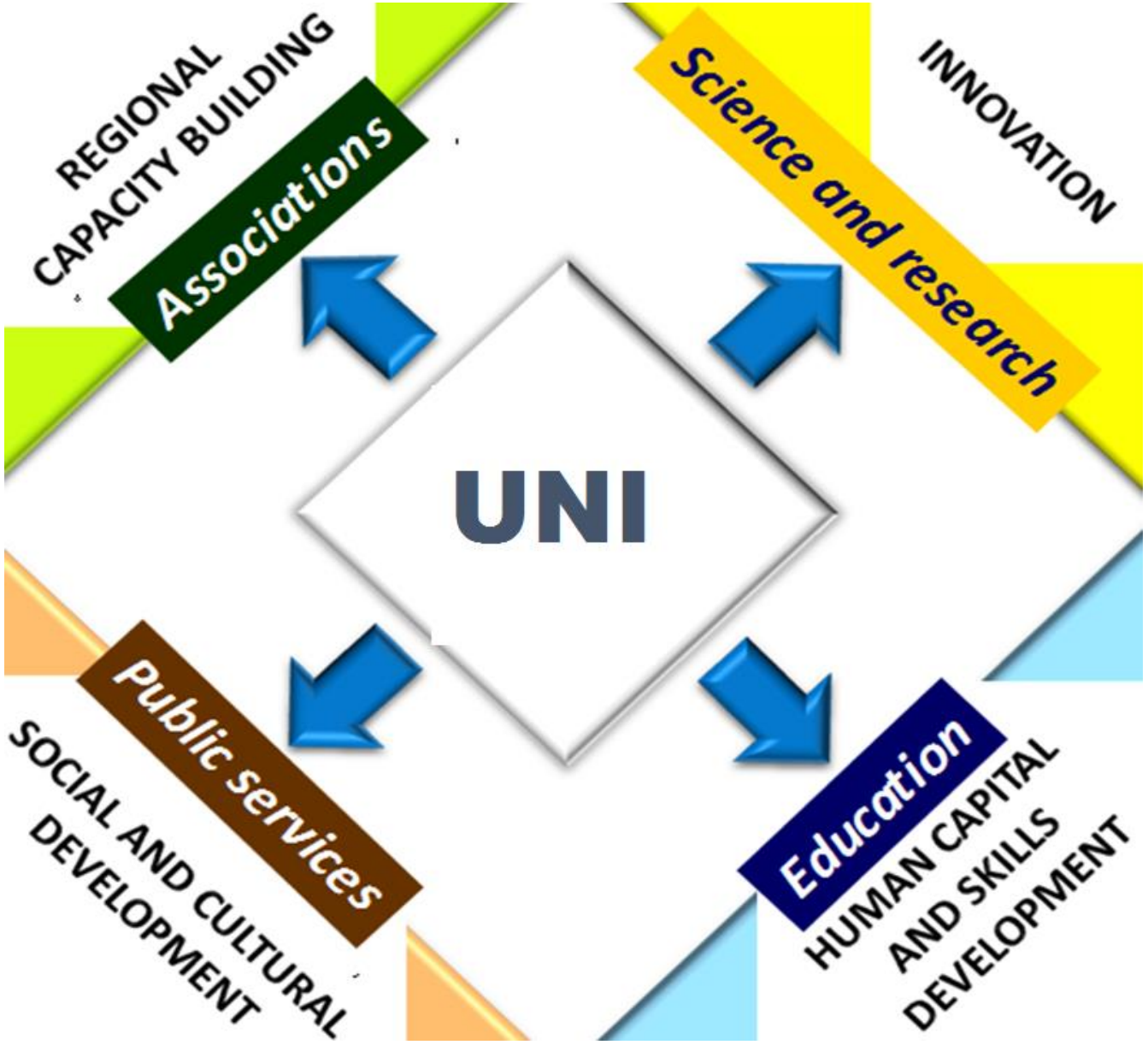
What kind of study is the greatest interest?

The universities in Košice offer all the required courses.



Source: Education at a Glance: OECD Indicators 2017. Tab. C3.1.

Universities in Košice are strong players in creation of Innovation Ecosystem



Challenges for universities

- Rising **social and educational inequality** (equality of opportunity, social inclusion, access to high quality education access, future jobs and skills, etc.)
- Recent **demographic changes** (ageing population and low fertility, family fragmentation, urbanisation, changes in lifestyle, etc)

As a result of increasing complexity and weakened reaction ability:

- New **migration patterns**
- The **rise of populism** and increasing **distrust** (post-truth society as an enemy of universities and academic freedom)

Missions of universities:

To play a pivotal role in generating knowledge, developing intercultural understanding and fostering civic engagement through their core missions.

Public policies, their dilemmas and new focus

- Oxford Dictionaries designated as the international word of the year ‘post-truth’ in 2016 and ‘youthquake‘ in 2017.
- ***‘Post-truth’*** *is* relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief.
- ***‘Youthquake‘*** is defined as a significant cultural, political, or social change arising from the actions or influence of young people.

- Universities as truth-seeking institutions have found themselves in the era characterised as post-truth.
- And that is why universities are and will be more confronted with mistrust and questioning their roles and knowledge they represent.

Public policies, their dilemmas and new focus

- At the same time, the word ***youthquake*** even more emphasises the responsibility of universities with **young people** who are deciding on future societal development.
- New role for public policies and universities - to rebuild a respect for **power of science and objective arguments**, both at the academia with young people and in the public.

This can be made it possible via **open and inclusive arenas**, based on academic freedom, leading to supporting **trust building and truth-seeking**.

„In our age of turbulence these two words – trust and truth – are inextricably intertwined.“

Courtesy: **O.P. Ottersen, rector of the University of Oslo**

University and its societal engagement

- **Technical university of Košice celebrated 65 years last year, and the key theme of the celebration in the presentations and greetings of the guests was social responsibility of universities.**

- The rector **Prof. Lambert Koch** (Wuppertal University, Germany) or the president **Prof. Joseph Klafter** (Tel Aviv university, Israel) highlighted:

Universities should not behave or having an image of ivory towers, separated from the worries of ordinary people.

University and its societal engagement

- **In a post-industrial world, also universities will have to become post-industrial, the goals of our efforts are achievable through supporting interdisciplinarity, creativity, inclusion and interconnection not only triple helix (academia, firms and government), but also with citizens and others.**

By the way, **in 1980, the cities of Wuppertal and Košice signed a first partnership agreement between the cities and universities of Western and Eastern Europe**, and **TUKE and Bergische universitat, developed activities** and **contributed partially to a piece of work to overcome iron curtain**.

Europe's symbol of unification Hans-Dietrich Genscher visited the TUKE and became an honorary citizen of the city of Košice.

Impulses for University social responsibility and engagement

Traditional role of the university in a society

University as Ivory tower -close circles of professors and students, later needs of society should be at the center of a university focus

- 20th century -

Built to meet the interests of industrial societies (or even to fulfill the plans of the number and structure of graduates to meet the needs of the industry before 1989)

-Magna Charta Universitatum 1988

autonomy, to meet the needs of the world, freedom of research and training,

European Higher Education Area

- New economic roles -

entrepreneurship, regional engagement, commercialisation of research

Corporate social responsibility (CSR)

- From the 60s -

companies should be focusing more on the impacts of their operations; not only profits but ethical principles, responsibility and behaviour reflecting the society, community and environment

- Today -

incorporated into business strategy – corporate philanthropy, volunteer activities, ethically produced products, corporate social marketing,..

- Future -

Should the universities adopt similar CSR approach?

Integration of social responsibility principles into strategic planning and annual reports

Impulses for Uni social responsibility and engagement

- **Traditional role of the university in a society -**
  University as ivory tower - close circles of professors and students, later needs of society should be at the center of a university focus

- **20th century: Built to meet the interests of industrial societies (or even to fulfil the plans of the number and structure of graduates to meet the needs of the industry before 1989)**

- **Magna Charta Universitatum 1988:** Autonomy, to meet the needs of the world, freedom of research and training

- **European Higher Education Area**

- **New economic roles:** **Entrepreneurship, regional engagement, commercialisation of research**

Impulses for Uni social responsibility and engagement

Corporate social responsibility (CSR)

- **From the 60s: Companies should be focusing more on the impacts of their operations; not only profits but ethical principles, responsibility and behaviour reflecting the society, community and environment**
- **Today:** Incorporated into business strategy – corporate philanthropy, volunteer activities, ethically produced products, corporate social marketing,..
- **Future: Should the universities adopt similar CSR approach?**

Integration of social responsibility principles into strategic planning and annual reports

New economic roles, determinants and engagement modes of universities 1 (*Courtesy:* Uyarra, E.*)

MODEL	KNOWLEDGE FACTORY	RELATIONAL UNIVERSITY
Main role of universities	Production of scientific knowledge	Exchange of knowledge
Main unit of analysis	Innovation outputs	Linkages
Main partners – beneficiaries	High-tech firms located in proximity to universities	Large manufacturing firms
Directionality of engagement	Unidirectional (implicit)	Bi-directional (implicit)
Key factors influ-encing impact	Research intensity	Structural factors (size of firm, sector, age, R&D intensity)

*Uyarra, E.: Conceptualizing the regional roles of universities, implications and contradictions. ***European Planning Studies*** 18.8, 2010, 1227-1246.

New economic roles, determinants and engagement modes of universities 2 (*Courtesy:* Uyarra, E.*)

MODEL	ENTREPRENEURIAL UNIVERSITY	SYSTEMATIC UNIVERSITY
Main role of universities	Active commercialization role	Boundary-spanning role
Main unit of analysis	Intermediaries	Systems / networks
Main partners – beneficiaries	Large manufacturing firms Spin-off firms	Regional clusters Regional SMEs
Directionality of engagement	Bi-directional (explicit)	Triple-helix (universities industry and government)
Key factors influ-encing impact	Organizational structures / forms	Regional system configuration Regional policy

*Uyarra, E.: Conceptualizing the regional roles of universities, implications and contradictions. ***European Planning Studies*** 18.8, 2010, 1227-1246.

New economic roles, determinants and engagement modes of universities 3 (*Courtesy:* Uyarra, E.*)

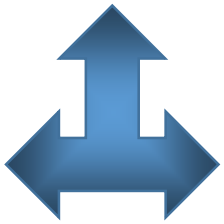
MODEL	ENGAGED UNIVERSITY
Main role of universities	Developmental role
Main unit of analysis	Spaces of governance
Main partners – beneficiaries	Regional stakeholders
Directionality of engagement	Responsive
Key factors influ-encing impact	Number and synergies between universities

*Uyarra, E.: Conceptualizing the regional roles of universities, implications and contradictions. ***European Planning Studies*** 18.8, 2010, 1227-1246.

New economic roles

- **Universities can decide about their role and engagement, not a „one size fits all“ approach (research university, or other model... primary educational institutions)**

University as Knowledge factory



Policy implications	**Co-location of firms and universities** **Increased funding for research**

<u>Positive consequences:</u> A rapid increase of the number of publications in the databases WoS, Scopus, Current Contents ...

Relational university: Bi-directional knowledge sharing between firms and universities

- T-Systems Slovakia – about 20 tailored courses,
- VW Slovakia: „Eng-A“, Internships, labs, etc.,
- US Steel Kosice Internships,
- RWE – TUKE agreement about PhD support,
- CISCO Academy program,
- Embraco - about 40 courses, etc.

Entrepreneurial university: The TECHNICOM University Science Park, MEDIPARK, PROMATECH, activities for active commercialisation and spin-off firms

TECHNICOM University Science Park with

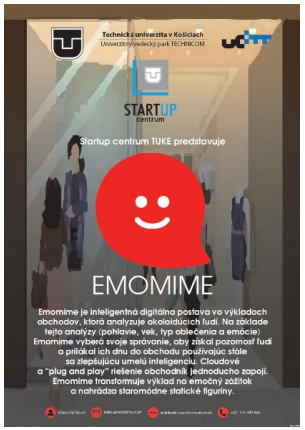
UCITT - University Centre for Innovation, Technology Transfer and protection of intellectual property rights

STARTUP CENTRE

VISIT OF THE PRESIDENT OF THE SLOVAK REPUBLIC

STARTUP centrum
TECHNICKÁ UNIVERZITA V KOŠICIACH

EXAMPLES OF CURRENT STARTUPS



Innovation & Technology Transfer

University research projects **with the city and region**, FP5 - FP7 and Horizon 2020

- **„Urban Sensing through User Generated Contents“** (Urban Sensing), FP7, Research for the benefit of specific groups, 2012-2014.

- **„Building a global multidisciplinary digital governance and policy modelling research and practice community”** (eGovPoliNet), FP7, CSA, 2011- 2014.

- **„Open Collaboration for Policy Modelling”** (OCOPOMO), FP7, STREP, 2010-2012.

- **„The Democracy Network“** (DEMO_net), IST FP6, NoE, 2006-2009.

University research projects **with the city and region**, FP5 - FP7 and Horizon 2020

- **„Web Technologies Supporting Direct Participation in Democratic Processes“** (Webocracy) IST FP5 Project, 2000-2003.

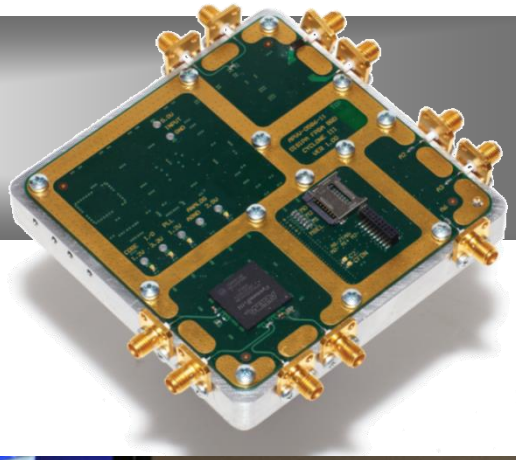
- **„The Cross Border Knowledge Bridge in the Renewable Energy Sources Cluster in the East Slovakia and North Hungary“** (KNOWBRIDGE), FP6 Project, 2009-2012.

- **„Coordination of R&D&I policies and their coherence with other policies in NAC countries“** (COGNAC), FP6 Project, 2006-2008.

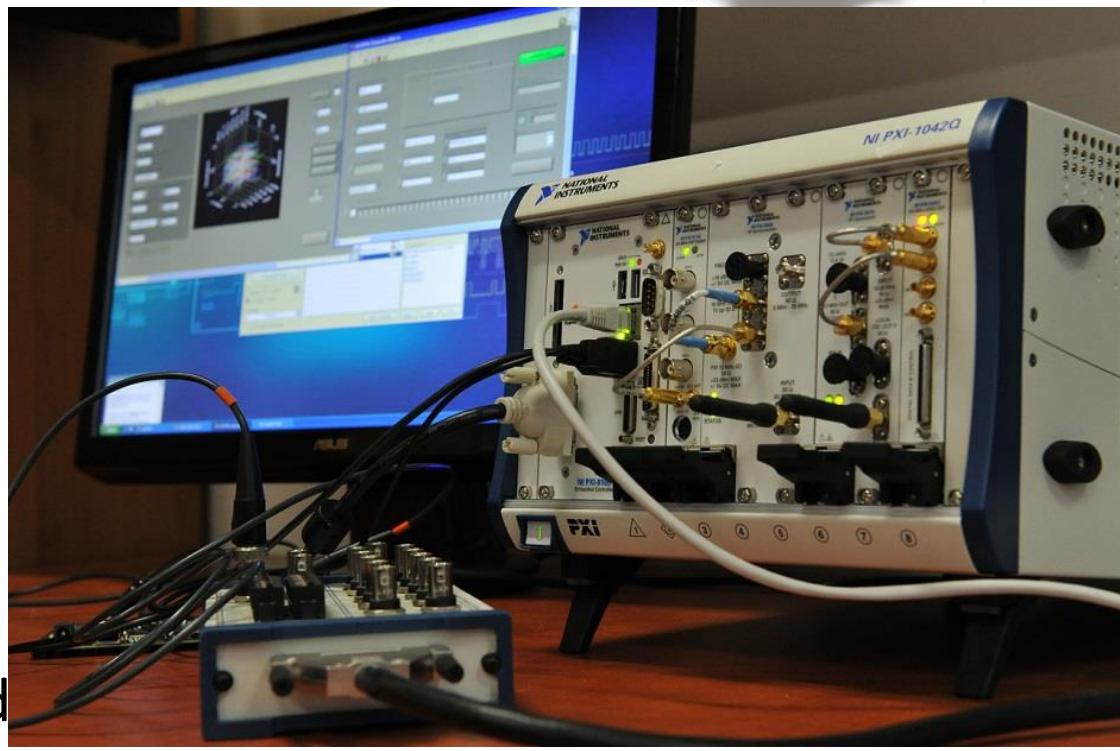
- **„North Hungary and Košice Bilateral Regional Innovation Strategy Project“** (NORRIS), FP6 Project, 2005-2008.

Faculty of Electrical Engineering and Informatics

Research team for electronic systems



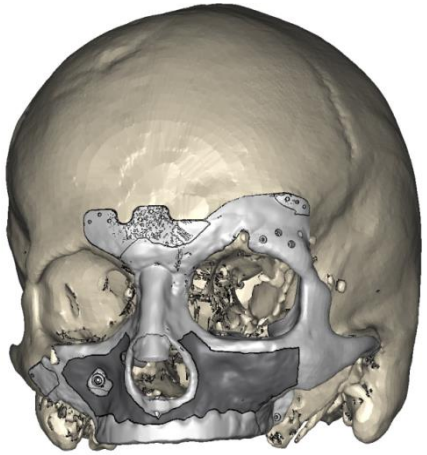
- Compressed sensing and non-orthogonal signal decomposition
- Real-time dynamic spectrum distribution in the cognitive networks
- TRUE random number generators on FPGAs (patented)
- Lead free solders for applications in power and high frequency electronics



Top Scientific Teams

Faculty of Mechanical Engineering

Center of Applied Biomedical Engineering



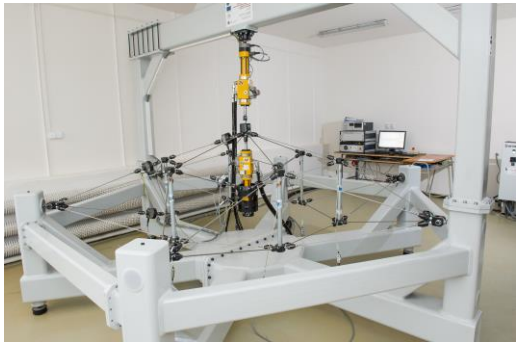
- Design of individual implants using medical DICOM data
- Design, biomechanical simulations and testing of serial implants
- Additive manufacturing and a 3D printing of individual implants
- Measurement, verification and validation of produced implants

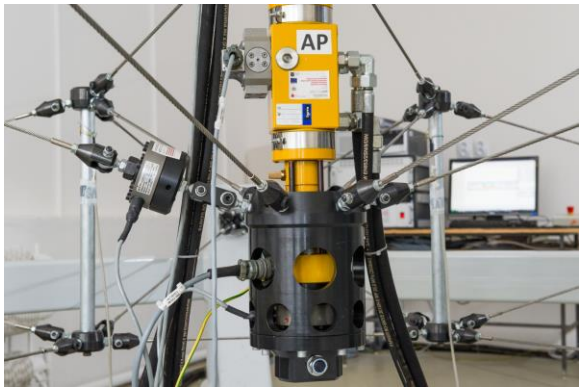
Top Scientific Teams

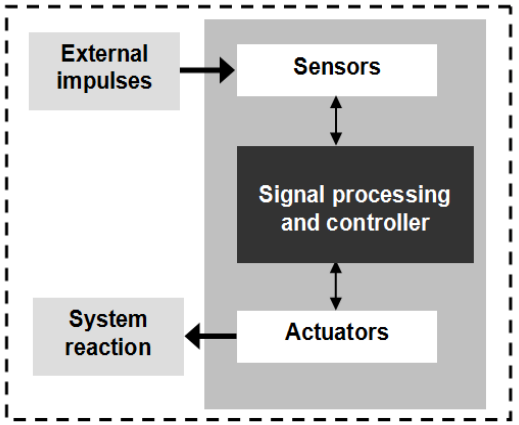
Faculty of Civil Engineering

A scientific team for computational and experimental analysis of adaptive structures

Why adaptive structures: *able to resist to the accidental loads*







Adaptive system – basic principle

Chameleon:
a natural
adaptive
System

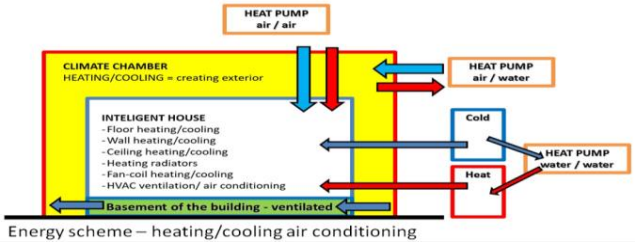
Top Scientific Teams

CENTRE FOR AN EFFICIENT INTEGRATION OF RENEWABLE ENERGY SOURCES

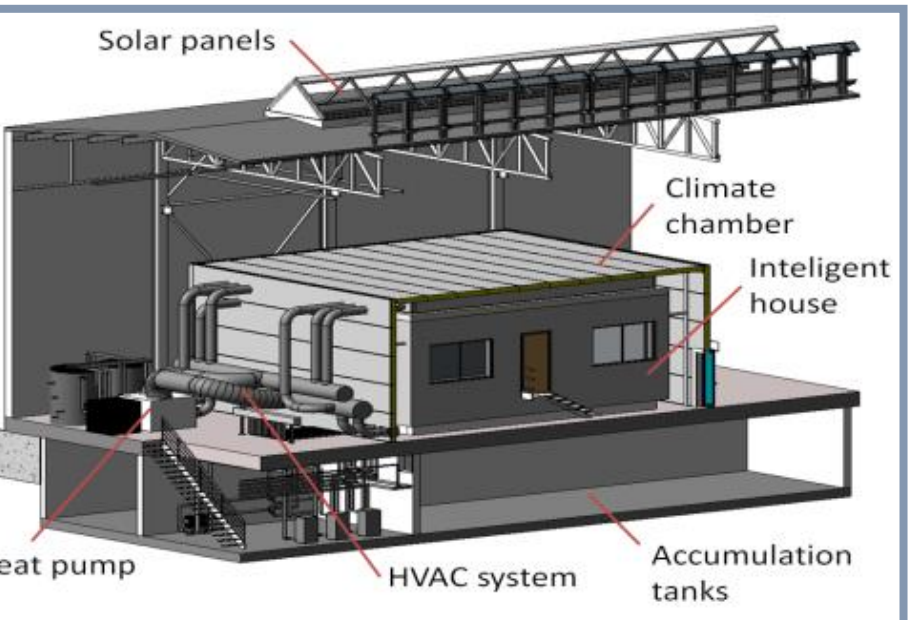
CENTRUM VUKONZE

Specific activities of the Center

- biomass
- hydrogen
- solar energy
- geothermal resources
- effective integration of renewable energy sources
- Intelligent low energy house



Energy scheme – heating/cooling air conditioning



visualization of climate chamber and inteligent house

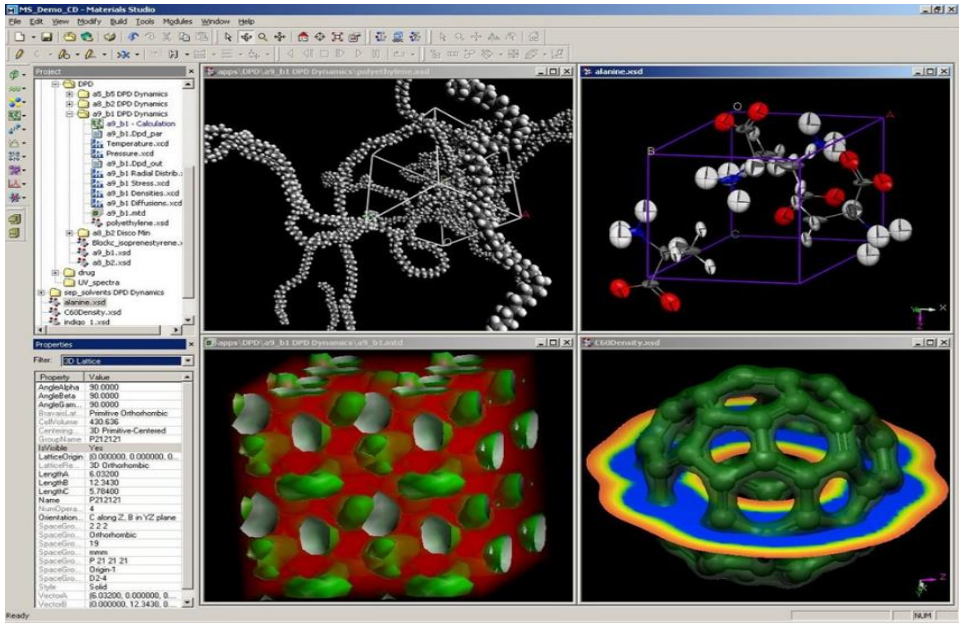
University Institutes

CENTER OF ADVANCED VISUALISATION

- **Research and development of new communication tools and cannels in the education, culture and art.**

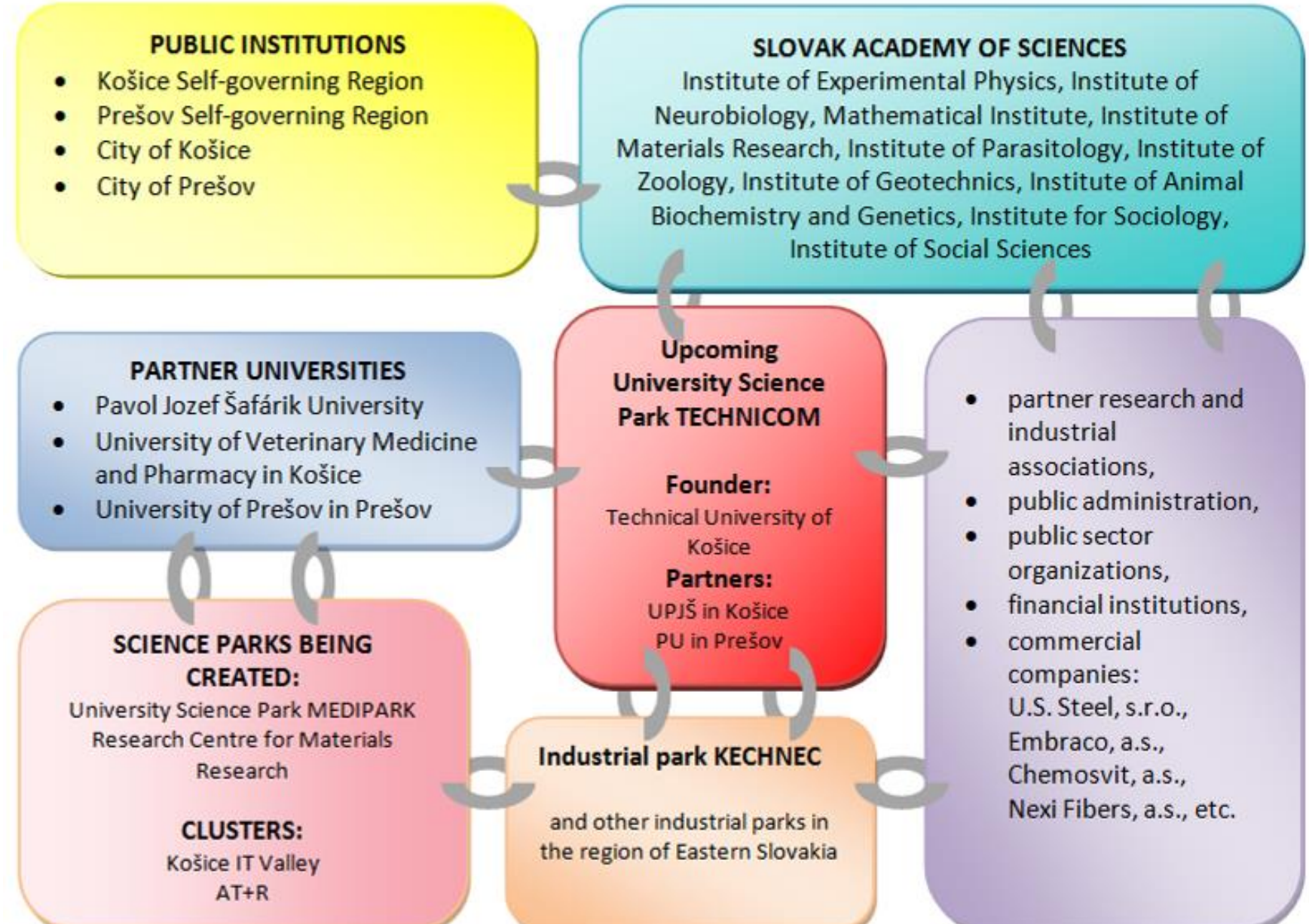
University Institutes

and many other institutes at all the universities ...



University Institutes

The goal is KOŠICE – Science City
Concept of innovation partnership in Eastern Slovakia



Systemic university: boundary-spanning role, involved in IT Valley regional cluster established in 2007, triple helix

Košice IT Valley

Association Founding Members:

- Universities (TUKE, UPJŠ)
- Košice Self-governing Region
- ICT Companies (T-Systems, NESS, Siemens PSE, VSE IT, Cisco, ST, Microsoft)

At present: over 50 members

košice IT VALLEY association that's IT!

Systemic university: boundary-spanning role, involved in IT Valley regional cluster, triple helix

AIMS OF THE ASSOCIATION:

- Development of human resources
- Improving the quality of educational and training programmes
- Enhancing the attractiveness of East Slovakia Region,
- Transformation of the region into knowledge-based society
- Development of information society within the region
- Enhancing social inclusion and reduction of regional disparities
- Establishing a communication platform among the public authorities, business sector and educational institutions
- Supporting scientific research projects
- Seeking funds in order to deliver its activities

Engaged university: actively engaged in the city and region – European capital of culture 2013 involvement, smart city initiative, etc.

- ***Youthquake:*** A significant cultural, political, or social change arising from the actions or influence of young people.

- **Košice The European capital of culture 2013**, generational change.

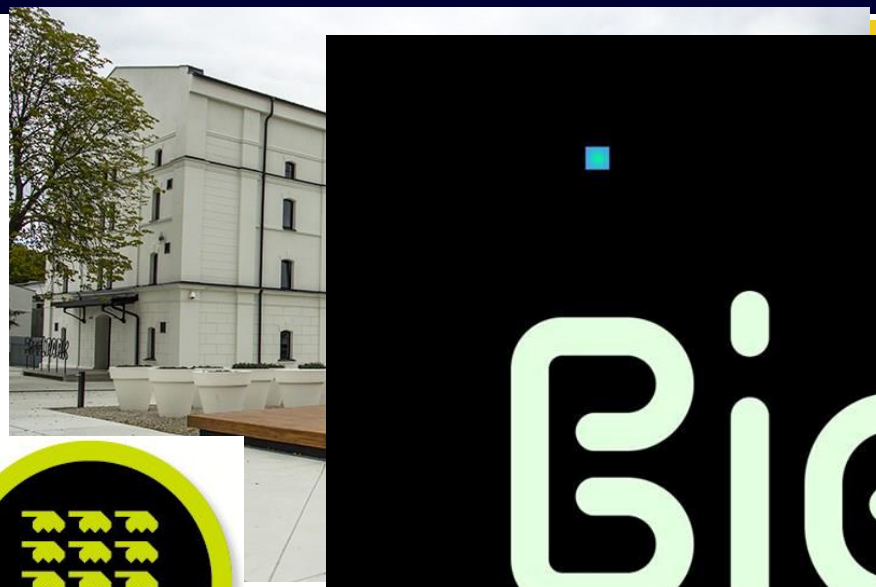
- Image of the city of Košice: from historical and industrial (metallurgy and manufacturing) to young, cultural **UNESCO creative city of media arts** (awarded in 2017).

- **Media arts** – build on the **IT employment and creative community**.

- Universities by **engagement of its employees and students** become in the heart of the Košice urban development.

KOŠICE2013
EURÓPSKE HLAVNÉ MESTO KULTÚRY

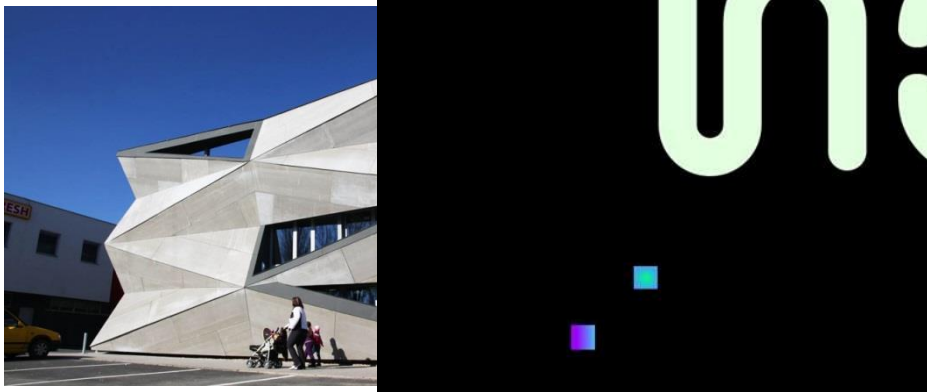
New cultural infrastructure and events



Biela noc

KASÁRNE
KULTURPARK

Halmi
SPACE



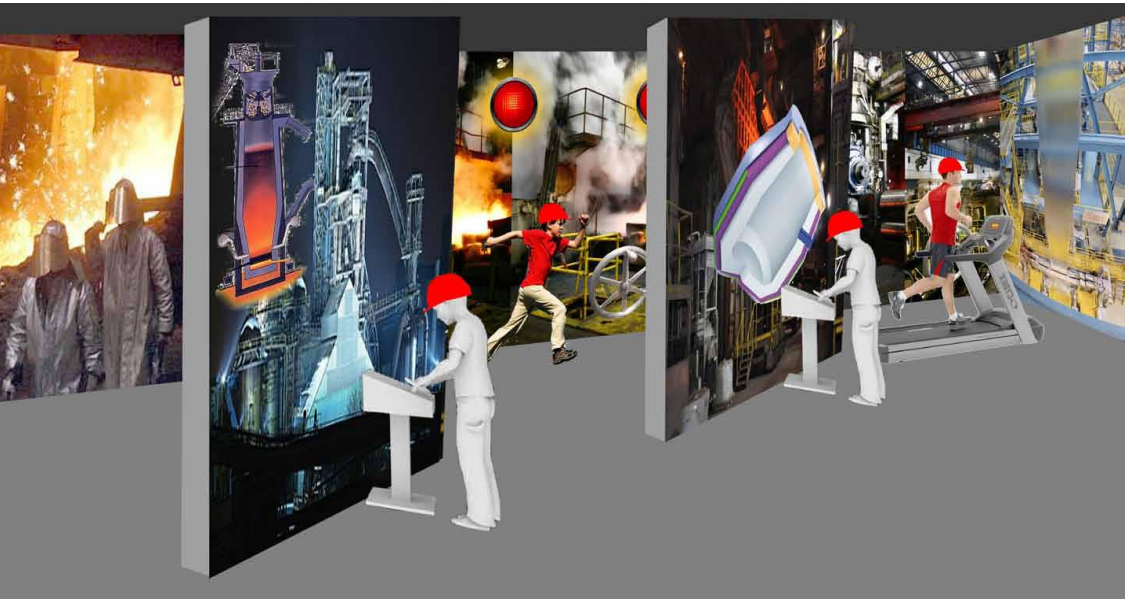
KOŠICE

Results of the cooperation

An attractive environment for young people from primary and secondary schools

Steel PARK

creative factory



KOŠICE2013
EURÓPSKE HLAVNÉ MESTO KULTÚRY

Košice is and will be a historical place
... with the creative elements ....

Košice: UNESCO creative city of media arts

The question for the future is:

How to build the **future portfolio of activities** and to create a corresponding institutional and material assurance ?

Impact of the university on the city of Košice

- **University impact:** besides human capital formation, knowledge creation and development of new technologies, is significantly influencing the region – stimulation of entrepreneurial activities and allocation of high-skilled workers.

MinebeaMitsumi
Passion to Create Value through Difference

MinebeaMitsumi from Japan
builds its largest factory in Europe in Košice.
For over 1000 employees and 100 researchers.

The concrete result of „policy synergy“ at national, regional, local city and, last but not least, university level.

Impact of the university on the city of Košice

Universities (through multiplier effects) have direct monetised effects on the local economy increase in employment, population and regional product/income:

- The study of the Faculty of Economics TUKE shows (prepared according to the methodology Luger et al. 2001):
- Local (additional) impact of TUKE in 2015 was: **443 jobs** outside of the university.
- **32 million EUR spent** in the city per a year (students, TUKE employees and TUKE expenditures in the city of Košice).

There would be a big hole in the city without universities ...

PRIORITY
PRIORITIES

How to inspire,
to motivate,
to guide?

How to stabilize young people in the region?

They need added values...

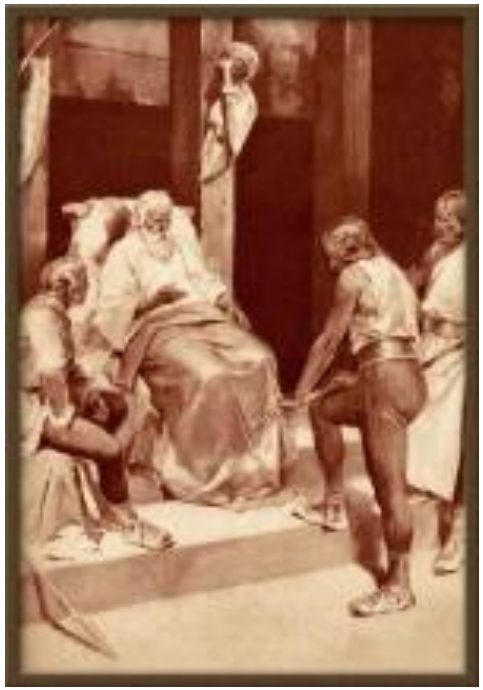
...we try to create them.

How to make the innovation ecosystem sustainable and robust

Svatopluk vision

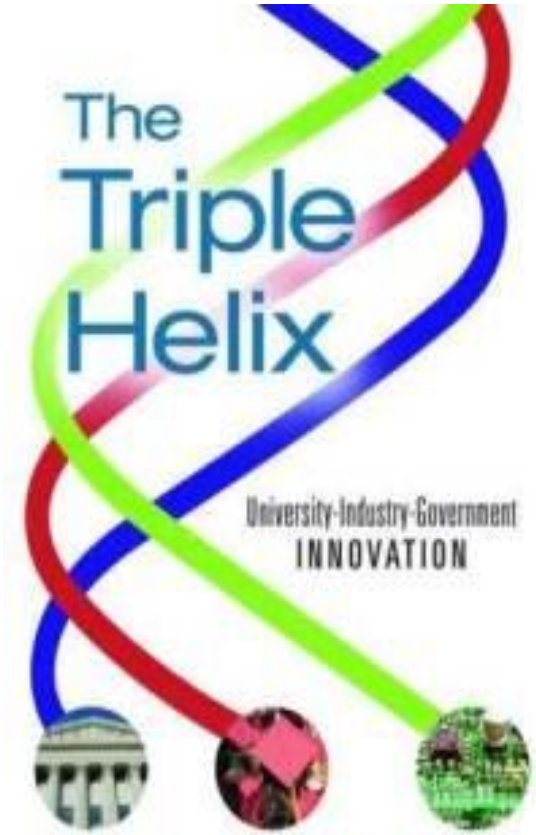
The legend about three wands

The legend about power of unity



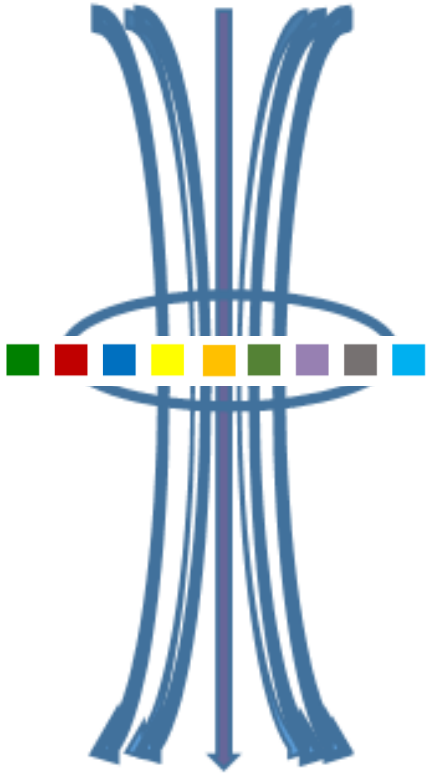
Svatopluk, prince of Great Moravia

EU vision



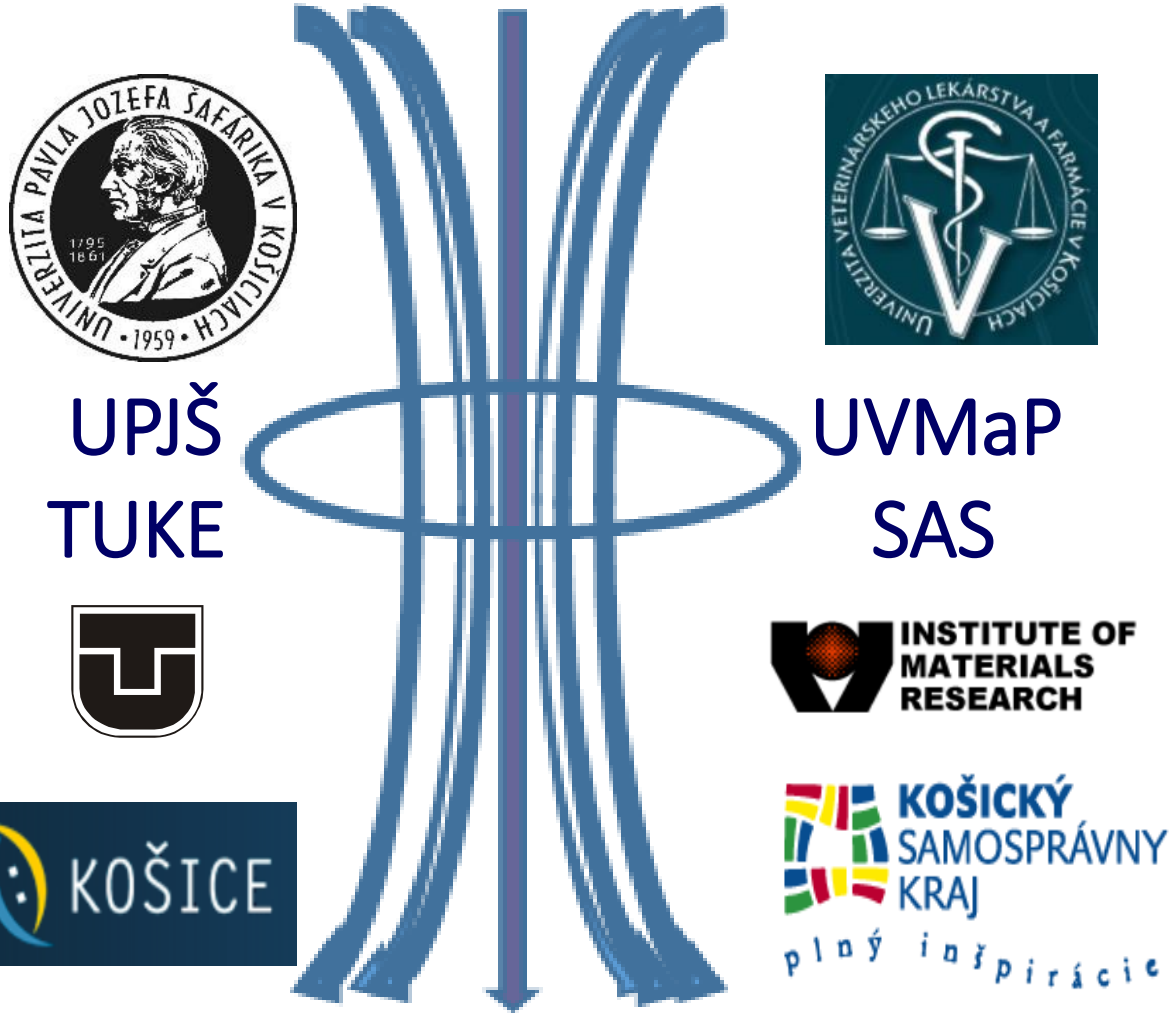
TUKE vision

The Multi Helix – Many wands



How to make the innovation ecosystem sustainable and robust

Universities and Institutes of SAS together with city and region of Košice vision



... and of course with a significant support of regional and national public policies ...

... and of course with a significant support of regional and national public policies ...

... and of course with a significant support of regional and national public policies ...

... and of course with a significant support of regional and national public policies ...

... and of course with a significant support of regional and national public policies ...

... and of course with a significant support of regional and national public policies ...

Thank you for your kind attention