

Most

Quarterly Bulletin of the Slovenian Business & Research Association

EDITORIAL



Building a knowledge economy requires a close synergy between the business and academic communities.

This is the basis for the enviable economic performance of the Nordic countries,

which elsewhere tends to be characterised by a 'culture gap'. This divide is interpreted by the generic differences between the business world of 'money-making' and the world of academic freedom and curiosity-driven research.

Numerous studies have been produced and many policies proposed in various EU countries in order to bridge this gap. Indeed, many mechanisms, instruments and institutions have been developed to facilitate and support such desired collaboration. Although some of these efforts produce good results, the overall picture still remains rather dissatisfactory. Why?

There is no doubt that building a proper knowledge-based economy remains highly complex and at times illusive. Is there enough motivation and political will to address the roadblocks to progress? If we try to close the gap 'mechanically' by simply pushing business and academia closer to each other, we will not succeed.

If we accept that these respective communities modernise in such a way that their collective contribution to such a knowledge-based economy is stronger than what they could produce on their own, then we begin to address this complex issue.

This means that academics need to feel the need to test their theories in real life, and accept that competition provides a greater chance of achieving excellence. The business world for its part needs to recognise that investment in R&D and innovation – whether in-house or from external sources – is the cornerstone to achieving and maintaining competitiveness in local and global markets. Europe's future depends to a large extent on the success of a business-academy partnership to grow the backbone of our knowledge economy.

Dr Boris Cizelj
Chairman, Management Board

2012 budget designed to stimulate economy

In April, the Government approved a budget with a decidedly pro-business slant, designed to jump-start the Slovenian economy. Following two quarters of negative growth, Slovenia is currently in recession, despite various stimulus measures taken in 2011. The specific measures to stimulate private sector investment and favour private sector growth taken in the 2012 budget to address this situation, include:

- A gradual decrease of the corporate tax rate from 20% to 18% in 2012, to 17% in 2013, and to 15% in 2015.
- Tax relief on investments is to be amended from 30% to 40% of the invested amount in equipment and intangible assets. The ceiling of €30,000 for this relief has also been abolished, thereby favouring greater private sector investment.
- The general allowance for investing in R&D has jumped from 40% to 100% of the amount invested. Other relief measures linked to investments in R&D therefore no longer apply and allowances for investing in less developed regions will be abolished.

The personal income tax bracket at which citizens pay the highest rate of 41% has been raised.

The budget was revised due to unrealistic expenditure, income and growth projections for the 2012 budget made in November 2010. In the last quarter of 2011, GDP fell by 2.8% compared to the same period the previous year. In 2011, GDP nominally rose by 0.6%, a drop of 1.3% lower than estimated in the revised 2011 budget. Eurozone governments, including Slovenia, have signed up to reducing their deficits to below 3% by 2013.

Maribor - European Capital of Culture 2012

Maribor has won the prestigious European Capital of Culture title with an ambitious regional proposal that mobilised five partner cities in Slovenia and the city of Guimaraes in Portugal. The objectives are the promotion of Europe's cultural wealth and building a mutual understanding and a common European identity, by integrating the important values of diversity.

The programme is based on four strands – TownKeys, Terminal 12, Urban Furrows, Life Touch – in order to reach multiple audiences while paying special attention to the peculiarities and characteristics of the cities' local environments. The events play a crucial role in the long-term sustainable, cultural, social and urban development of the towns.

Maribor is the focus of the events and is also an important economic, cultural and educational centre of Slovenia. **Murska Sobota** lies in the Pannonian region near the magic river Mur, inspiration for countless artists past and present. **Novo mesto** is the centre of the region Dolenjska where Primož Truber, the founder of Slovenian literature, was born. **Ptuj** is Slovenia's oldest and **Slovenj Gradec** is the smallest town of the project partners. With its beautiful location, surrounded by the amazing mountains of Koroška, it is the focal point of the visual arts. **Velenje** is the important industrial centre of the Savinjska region and thus a modern city of culture, youth and sport.

<http://www.maribor2012.eu/en/>

BRIEFS

Business Briefs

► **The Euro celebrates its 5th anniversary**

This year Slovenia celebrates the fifth anniversary of the euro adoption. At the same time, Europe is celebrating the euro's 10th anniversary. Both anniversaries come amid the most serious crisis in the 13-year history of the currency. Slovenia's adoption of the euro was accompanied by extensive efforts to prevent price increases caused in 2007 by the economic boom and an overheating economy as well as global food and energy price shocks. Slovenia had the highest inflation in the euro zone in 2007 and 2008.

Today, experts agree that the euro adoption was a positive move as it stabilised the economy and encouraged trade, a significant aspect for export-oriented Slovenia.

► **National Railway 2020 business strategy**



Igor Blejec, general manager of the national railway operator Slovenske Železnice, has confirmed the company's new 2020 business strategy. It would "reverse the perennial trend of losses and enable in the coming years positive operations and establish an effective system," said Mr Blejec in a press release.

The focus is on optimisation of business processes, reaching positive earnings before interest and tax, reducing the debt-to-capital ratio and establishing an effective system for worker social protection. The company will restructure and reduce the number of employees as a "first condition for positive operations in 2013 and 2014," Blejec said. In addition, the RailNetEurope Corridor 11 that links Germany, Austria, Croatia, Serbia and Bulgaria to Turkey, will be developed.

► **Pipistrel d.o.o Ajdovščina to win NASA award**

NASA's largest prize in aviation history, created to inspire the development of more fuel-efficient aircrafts and spark the start of a new electric airplane industry, has been awarded to team Pipistrel-USA.com of State College in Pennsylvania, for its recently

launched major innovation, the *Taurus-Electro*, the world's first two-seater electric propulsion aircraft. The competition marks the culmination of more than two years of aircraft design, development and testing. It is also the first time that full-scale electric aircrafts have performed in competition.

Pipistrel is the world's leading motor glider aircraft designer and producer. Based in Slovenia, it was established in 1987 as the first private aircraft producer in the former Yugoslavia. <http://www.pipistrel.si/>

► **Slovenia - One of the World's Most Complex Economies**

The recently published Atlas of Economic Complexity – Mapping Paths to Prosperity by Harvard University and the Massachusetts Institute of Technology (MIT) indicates that Japan and Germany have the world's most complex economies while Slovenia holds 10th place.

The concept behind the ranking is a country's productive knowledge. "The complexity of an economy is related to the multiplicity of useful knowledge embedded in it. For a complex society to exist, and to sustain itself, people who know about design, marketing, finance, technology, human resource management, operations and trade law must be able to interact and combine their knowledge to make products. Economic complexity, therefore, is expressed in the composition of a country's productive output and reflects the structures that emerge to hold and combine knowledge" said Harvard economist Ricardo Hausmann. <http://www.hks.harvard.edu/centers/cid/publications/featured-books/atlas>

► **Car Parts Maker TPV Gets Business Award**



President Tuerk awarded the Slovenian Business Excellence Award for 2011 to the Novo mesto-based car parts maker TPV d.d. The award was conferred this year after a four-year break, as TPV was the only company to meet the strict criteria for quality of business based on the

development of know-how and innovation. According to CEO Vladimir Gregor Bahč, the company's competitive advantages are the ambition and loyalty of the employees, focus on innovation, constant progress and original, proactive and flexible work.

TPV, which employs 595 people, supplies parts for most global car producers from its plants in Slovenia, Serbia and Russia. The award was a call to Slovenian managers to actively introduce the basic principles of excellence in businesses and public institutions. <http://www.tpv.si/en/>

R&D Briefs

► **Hidden Champions**

In December, Professor Danica Purg, president of the IEDC-Bled School of Management and founder of the Central and East European Management Development Association (CEEMAN) presented the results of a two year research project into "hidden champions", defined as mostly unknown mid-size companies holding international market leadership positions, usually in a narrow product group and having in many cases created distinctive business models and practices.

The objective was to identify companies in Central and Eastern Europe (CEE), Turkey and Kazakhstan that fulfill these criteria, Purg explained. At least 16 Slovenian companies qualify as "hidden champions". A further aim was to check the assumption that some CEE's are lagging behind in terms of their economic position in the globalised business world.

► **Satellite-guided floating robot**

Slovenian scientists, in cooperation with colleagues from Italy, Norway, Switzerland and Russia, have developed a satellite-guided floating robot for monitoring water pollution in standing waters. The robot was developed at the Jožef Štefan institute as part of the international project HydroNet that was launched in December 2008, aimed at improving the monitoring of water bodies.

The robot is guided through a satellite, collects samples and makes all necessary analyses on its own. It covers 40 kilometers within 12 hours and can constantly take samples that are normally taken only once a month even from 50 meters below surface. <http://www.hydro-net-project.eu/>

► **Centre of Excellence Space-SI**

Space technology is undergoing revolutionary transition especially in the field of micro and nano satellites. Since 2010, a consortium of 46 Slovenian scientists and engineers from five academic institutions

and six high-tech SMEs, engaged at the Centre of Excellence Space-SI, has recognised the great potential of emerging technologies in space-related applications.

Research and technological activities focus on advanced materials and structures, micro-propulsion systems and assemblies, satellite control, communications, automatic data processing and distribution as well as computational and experimental research of micro and nano satellite systems. The developed technologies will be applied in earth observation, meteorology and astrophysics and enables Slovenian partners to participate in international projects and programmes of the European Space Agency. <http://www.space.si/en/>

● **First European Research Council project grant for Slovenia**

In 2011, Dr Nedjeljka Žagar, a meteorologist from the University of Ljubljana, was awarded the European Research Council Starting Independent Researcher Grant for her project "MODES: Modal Analysis of atmospheric balance, predictability, and climate".

This first ERC funded Slovenian project aims to advance scientific understanding of dynamical properties of the atmosphere and climate systems over spatial and temporal scales. Envisaged is an unconstrained, user-friendly tool for carrying out analysis of weather and climate model outputs.

Finding solutions to the disorders of climate change requires scientific input across many disciplines, including physics, biology, earth sciences, sociology, and economics. Significant efforts worldwide have thus been made to fund research in these areas. Since 2007, the ERC has funded 48 projects aiming to increase our understanding of the complexities of the climate model and its implications for societies and natural systems.

<https://www2.image.ucar.edu/sites/default/files/event/workshop/files/CESMUQ-Zagar.pdf>

Agriculture Briefs

● **Slovenia helps Balkans craft EU-compatible farm regulations**

Slovenia guaranteed expert assistance in drafting laws and setting up institutions in the field of agriculture at a meeting of the standing working group for rural development in Southeast Europe in Skopje in November 2011. The debate focused on the reform of the EU's common agricultural policy until

2020. Agriculture Ministry State Secretary Tanja Strnisa expressed support for the strategic goals of the reform, in particular the preservation of the food production potential and sustainable management of natural resources. The standing working group, set up in 2005, is a platform for exchange and mutual assistance designed to benefit Balkan countries aspiring to join the EU.

● **50th International Agra-Agricultural Food Fair**



The 50th Agra-Agricultural Food Fair takes place in Gornja Radgona from 25-30 August 2012 and is dedicated to the latest products, services, technology and trends in this sector. Exhibitors showcase not only food and wine but also processing and packaging machines, catering equipment, seeds and plants, agents for animal nutrition and plant protection and craft product materials. Attendees get to know innovative ideas and latest developments in the agricultural sector and have the opportunity to exchange ideas and brainstorm on the latest food development technologies. The fair is an ideal location for both visitors and exhibitors to build excellent business relationships and strengthen their position in the marketplace. <http://www.fortisvel.com/files/2012/Newsletter-AGRA2012-ANG.pdf>

SBRA Partners

● **Slovenia opens metrology laboratories in Bosnia-Herzegovina**

The laboratory for electric magnitude measurements in Sarajevo and the laboratory for testing the safety of electronic devices and electromagnetic compatibility in Banja Luka were opened by Slovenian Foreign Ministry State Secretary Dragoljuba Bencina at the end of 2011. Contributing €820,000, Slovenia provided 75% of the funds as part of its development aid to Bosnia-Herzegovina (B-H). The project enables the entry of Slovenian companies to B-H and cooperation among research institutions of both countries, while B-H also gains the necessary equipment.

The venture was carried out in cooperation with the Slovenian Institute of Metals and Technology (IMT), the Bosnian Institute of Metrology, and the Slovenia's Centre for International Cooperation and Development (CMSR). <http://www.imt.si/>

● **Riko Hiše builds modular house in Japan**



At the initiative of the Slovenian Foreign Ministry and in cooperation with the Bigbox company, Riko Hiše built a house in the town of Higashimatsushima to improve residential conditions in the region affected by the tsunami.

Riko Hiše developed a prototype that can be easily assembled, and is both suitable for long-distance transportation and comfortable to live in. Riko Hiše's quick response time, the advanced equipment and high production capacity are especially suited for solving housing problems after natural disasters.

The building was erected within three days and handed over to the Murohawa fishing community by the Ambassador of Slovenia to Japan, Helena Drnovšek. Mayor Abe emphasised that this donation will strengthen the relationship between Slovenia and Japan. <http://www.riko-hise.si/>

● **University of Ljubljana**



The University of Ljubljana became again a member of SBRA in January 2012. The University practices basic, applied and development

research, striving for excellence and quality of the highest standard in all fields of science and arts, such as the humanities, social sciences, linguistics, arts, medicine, natural sciences and technology. www.uni-lj.si

● **University of Maribor**



The University of Maribor also signed a contract with SBRA in January 2012. It is a broad-based institution committed to excellence in education, the extension of knowledge

through basic, advanced and applied world-quality research as well as creative and artistic expression. With its complement of Arts and Sciences, Law, Business, Engineering, Medicine and Pedagogy, the university promotes cooperation, competition and multi-disciplinarity. The university also encourages students and staff mobility and active participation in international associations, networks and projects.

Founded in 1975, the university constitutes 17 faculties and accommodates 17,829 undergraduate and 3,161 postgraduate students.
www.uni-mb.si

► Forestry Institute of Slovenia



SBRA also welcomes the Forestry Institute of Slovenia as a new member, a national research organisation in the field

of forests and forested landscapes, forestry, wildlife management and hunting. Its main role as a public institution is performed as part of the National Research Programme and the National Forest Development Programme.

Within its field it directs and gives expert supervision to the monitoring of degradation and damage to forests; to reporting, prognostic-diagnostic service for forests, forestry seeding and nursery activities; to an information system for forests and to preparations for setting up an expert basis and norms for the performance of forestry work.

The research work of the SFI includes projects within 10 scientific research departments thereby providing research and development services to the Slovenian State Forest Service. <http://www.gozdis.si>

Other News

► EU Ambassador to Pristina

Slovenia's outgoing Foreign Minister Samuel Zbogar, takes over the office of the EU's Special Representative and EU Ambassador in Kosovo as of February 2012, confirms the EU's High Representative for Foreign and Security Policy, Catherine Ashton. With his appointment Slovenia has its first high-ranking official in the European External Action Service (EEAS). It is his goal "to bring as much EU to Kosovo and to bring Kosovo as close to the EU as possible" says Zbogar in an interview with the Slovenian news agency STA. He expects progress in the dialogue between Pristina and Belgrade and will work to promote a stable, viable, peaceful, democratic and multi-ethnic Kosovo while contributing to stability and regional cooperation in the Western Balkans.



KNOWLEDGE ECONOMY NETWORK

Unlocking the world's knowledge economy potential

www.knowledge-economy.net

KEN PHILOSOPHY

What kind of society and economy do the KEN members and partners consider as their preferred model to which they wish to actively contribute?

- Effective, inclusive and truly **democratic governance** - based on the rule of law, transparency, accessible and responsible government, respecting subsidiarity and responsible, proactive citizenship;
- **Market economy**, with fair distribution of rewards and reasonable support for the weaker community members; appreciating and effectively supporting entrepreneurship and innovations with readily available venture capital;
- **Corporate social responsibility** and **business ethics** supporting sustainable development at all levels, with particular reference to local and regional levels;
- Respect for values of **knowledge society** and appreciation of excellence;
- Full **gender equality** and balance, allowing society and the corporate world to benefit from gender-specific human qualities.

KEN OBJECTIVES

As a network with the ambition of exerting global influence, KEN offers to Triple Helix partners, NGOs and the media a global platform for

knowledge society developments, with particular emphasis on human capital-related issues. This mission is pursued through the following specific objectives:

- **Increase awareness** of the critical importance of developing a knowledge society, and upgrading knowledge-based-competitiveness through stronger entrepreneurship, supported by responsible governance in corporate, academic and political environments;
- **Motivate stakeholders** and encourage policy-makers to play an active role in creative dialogues to resolve practical knowledge economy issues;
- **Enhance members'** international contacts and mutual cooperation;
- **Disseminate cases of good practice amongst the members and beyond.**

KEN PROMOTES KNOWLEDGE ECONOMY GLOBALLY

Aiming at supporting and encouraging knowledge economy developments through productive networking and collaboration among members, and interaction with stakeholders and policy and opinion makers on local to international level, KEN's activities cover the following four key domains of the knowledge economy:

- **Education and training** – building relevant competencies particularly in tertiary education;

- **Research and development** – focusing on RTDI policies;
- **Innovation** – including social innovation;
- **Entrepreneurship** – including gender balance.

KEN's approach is characterised by the emphasis on the role of human capital, with the objective of making change happen on the ground. Consequently, the focus is on the practical implementation of knowledge economy policies - at the organisation and at local, regional, national and international level. KEN is therefore paying particular attention to methods of monitoring and measuring practical progress in the above mentioned domains. This helps members easily compare their relative progress to other countries

PRINCIPAL KEN ACTIVITIES

The activities of KEN's predecessor, the EREF Network which started in 2005, included annual fora on various aspects of the knowledge economy. Since 2007 the annual fora, organised thus far in: Graz, Austria; Istanbul and Ankara, Turkey; Trieste and Gorizia, Italy; Ottawa, Canada; and Drammen, Norway, have been preceded by 15 preparatory workshops. From 2012, KEN preparatory workshops are being organised throughout the whole year.

KEN is also involved in policy dialogues where inputs are made along the recommendations adopted at the respective annual fora.
<http://www.knowledge-economy.net/forum-2012/workshops>

The next annual Forum will be held in Maribor, Slovenia, 11-12 June 2012, on the topic *Developing Knowledge Economy through Partnerships*.

KEN SERVICES FOR MEMBERS

Ken offers the following services to its members:

- Access to restricted KEN Portal areas;
- Monthly electronic bulletin;
- Weekly briefs – topical news according to members' interest profiles;
- Invitation to the annual KEN Forum and preparatory workshops;
- Invitation to all KEN events;
- Up to five annual consultancy hours;
- Promotion of members' best practice samples;
- Participation at the KEN annual general meeting;
- Indirect participation in the work of the KEN Steering Committee through national delegates.

MEMBERSHIP PROFILES

The following types of organisations are welcome to join KEN:

- Local, regional, national and international authorities and their executive agencies involved in knowledge economy issues;
- Companies, associations, chambers, business groups, clusters;
- Banks, investment groups, insurance companies, venture capital groups, and other entities offering financial services;
- Academies of science, technology and science parks, competence centres, centres of excellence;



- Universities and other institutions of higher education;
- Research institutes, centres, laboratories;
- Professional associations (local, regional, national, international);
- Foundations (regional, national, international);
- Non-governmental organisations;
- Other entities/individuals interested in knowledge economy issues.

Join KEN as a member, partner, sponsor or patron, and your efforts to reach excellence, greater international visibility and leadership in your area of knowledge will be upgraded and systematically supported!

KEN AWARD!

The Annual Award for Best Practice represents another important dimension of KEN's activities. The Award acknowledges exceptional achievement and performance of policy makers and stakeholders in the four KEN knowledge economy domains.

This year **three categories of Awards** will be presented as follows:

I. KEN Awards for distinguished achievement in four domains:

1. Education – **Japan** (successful reform of tertiary education system)
2. Research and Development: **Tubitak, Turkey** (contribution of public and private R&D funding to economic growth)
3. Innovation : **Denmark** (successful and comprehensive innovation system)
4. Entrepreneurship: **U.S. Small Business Administration, USA** (support to SMEs and venture capital leveraging).

II. KEN Award for media and NGOs will be presented to the British Broadcasting Corporation, BBC.

III. KEN Best Practice Awards for original and successful practice in any domain of knowledge society and economy development:

1. **European Affairs Fund – AP Vojvodina (Serbia)** – is an example of good practice in multicultural education.
2. **Knowledge Mobilisation Unit – York University (Canada)** – is an example of good practice of a new scheme run by the University and involving all Triple Helix Partners.
3. **SEECEL – South East European Centre for Entrepreneurial Learning (Croatia)** – is an example of good practice in successful regional cooperation in training and education.

EU-12 PARTICIPATION IN FP7

The European Union has been strengthening its scientific and technological bases throughout seven generations of Framework Programmes (FP) for research, development and innovation. Nevertheless, as global competition is growing, Europe needs to advance at a faster pace, drawing on all its intellectual potential. Although research, development and innovation in Europe should continue to enjoy equal opportunities within each FP, the Expert Group on the Interim Evaluation of the 7th Framework Programme (FP7) found "that the 'performance' of most of the new Member States (EU12) falls short of that of the old Member States (EU15)". On the request of the Ministry of Higher Education, Science and Technology of the Republic of Slovenia, scientists prepared a statistical analysis, studying factors that might influence the performance of EU12 countries in FP7.

The recent debate on participation in EU FPs, organised by the Permanent Representation of the Republic of Slovenia to the EU and the SBRA in Brussels, featured a presentation of the main findings of the statistical analysis by author Prof. Anuška Ferligoj from the University of Ljubljana. A perspective on the collaboration between industry and academia was delivered by Dr Boris Cizelj from the SBRA. Both presentations were followed by a lively debate including the interim Minister for Higher Education, Science and Technology, Dr Igor Lukšič and the ministry's Director General for Science, Dr Jana Kolar. Participants concluded that there was no simple indicator to adequately illustrate the EU12 participation in FP7. There are however different performance indicators (e.g. participation in relation to GDP per capita, FP funds obtained in relation to GDP, success rate, number of coordinators, etc.), and while some of the EU12 countries in certain areas perform above the average of EU27, others fall significantly below.

Looking at FP7, the EU12 countries are characterised by low financial contribution per capita and project, partly due to lower costs of researchers, and by fewer coordinators. Although the study emphasises how Member States can improve participation, it does not address the role of the European Commission. In order to improve their participation, these countries need to invest more into science and research.

The population of a country also matters. Although, little can be done to increase a country's population so as to offer more possibilities for networking on a national level, it can virtually grow in size by opening its programmes to collaborations across borders, thereby contributing to stronger integration of its research community into the European Research Area. Member States can establish adequate measures through which researchers would be stimulated to take on project management roles. With this, their visibility, impact, as well as financial participation is likely to increase.

Clustering of countries according to six FP7 inclusion indicators

The **first** component is mostly defined by the following indicators: financial contributions per retained project, percentage of coordinators according to retained projects and FP financial contribution per capita.

The **second** component is defined by: the number of retained projects per billion of GDP, FP financial contribution per million of GDP and number of retained projects per 100,000 inhabitants.

