



Dear Readers,

The Secretariat of Knowledge Economy Network - KEN is proud to present the first issue of its monthly electronic Bulletin.

KEN Network has evolved from EREF, the European Regional Economic Forum, which started its activities in 2004 with an annual Forum organised in Nova Gorica, Slovenia. It grew into an informal network of 16 European regions and countries, interested in boosting their knowledge-based competitiveness, exchanging good practice, encouraging collaboration and implementing new knowledge into innovative products. Also, the Network facilitated active dialogue between policy makers and the Triple Helix stakeholders. Finally, it supported better utilization of European Union funds for innovative projects.



End of 2010 KEN Network was established and is now registered in Brussels as a non-profit association. This is our response to a larger, global need to enhance and support efforts to build knowledge economy, not only at European, but at truly international level. Europe still has many assets to improve its competitiveness, but has become a different global player and needs to learn more from other dynamic economies.

With contemporary explosion of knowledge and the need to specialise, we are increasingly challenged by losing the bigger picture, or by the danger of neglecting one aspect, due to the overwhelming importance of other aspects of problems we are working at. Decision makers are expected to know more than ever before, and often requested to apply their knowledge to an unprecedented situation.

In these circumstances KEN Network offers opportunities for learning and communicating among organisation and individuals interested in knowledge economy issues - going beyond traditional macro-micro, policy-implementation, and conceptual-operational divisions.

In KEN we believe that modern approaches manage to remain focused on the solution by integrating all relevant aspects with a holistic attitude. We propose to apply multidisciplinary methods and foresight, and to carefully anticipate possible impact and indirect repercussions of our future activities. Finally, our efforts have to be guided by »out-of-the-box« thinking, and at the same time strictly result oriented. Also, we subscribe to the need for learning from our own, as well as from other peoples' achievements and mistakes. Thanks to easy access to information the world has never been so small. Relevant information is usually only a few clicks away.

KEN members will discover through our services (monthly el.bulletin, occasional briefs, information on [KEN Website](#), and participation at KEN annual Forum and other conferences and workshops) a treasure of highly useful information, con-

## Knowledge Economy Network Bulletin

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[www.knowledge-economy.net](http://www.knowledge-economy.net)

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tacts, good practice cases, and other inspirational ideas.

KEN Network will cover all areas of knowledge economy in general, and education and training, R&D, innovation, advanced management – including HR and marketing, and socially responsible entrepreneurship in particular.

The Bulletin will fulfill the following functions:

- inform Network membership on activities of the Network and its members, particularly about the preparations of the upcoming KEN Workshops and annual Forum;
- disseminate resolutions and recommendations of Annual Fora, as well as working documents, such as: bibliographies, analytical compendia of relevant documents, and draft recommendations for KEN Workshops;
- disseminate relevant policy documents (adopted by regional, national, EU and international bodies) related to building knowledge economy, with particular emphasis on implementation issues;
- disseminate knowledge economy good practice cases from around the globe;
- serve as an information exchange and knowledge transfer platform for Network members.

The Bulletin is presented in a modern, practical format, allowing readers quick access to sections and texts of your personal choice. With your Adobe Reader use the Bookmark option, normally found on the far left of the programme or under View -> Navigation Panels -> Bookmarks, to help you navigate through various sections at the click of a button. The upcoming events and recently published documents sections, are further elaborated on the KEN website (i.e. with use of an interactive and daily updated calendar). The website should be fully operational at the beginning of March.

The KEN Bulletin will be divided into the following sections:

- editorial (briefly summarizing the content of the issue, and addressing a topical problem);
- articles on key topics of knowledge economy (reporting on the global debate);
- summaries of developments concerning knowledge economy;
- brief presentation of knowledge economy good practice cases (selection of most relevant cases – presented through KEN methodology);
- readers question to the editor – about practical problems in building knowledge economy;
- list of select recently published documents (with active URL links);
- list of select upcoming events (with active URL links);
- thematic bibliographies concerning knowledge economy;
- relevant indicators, statistics and graphs;
- draft programmes of KEN Workshops and the Annual Forum.

The KEN Network is committed to contribute to strengthening knowledge economy and competitiveness by providing good service to its members worldwide. With your active response, and by joining us as Network's members, you are enabling us to accomplish this important task.

Welcome, and thank you for joining KEN!

Boris Cizelj  
KEN Chair:



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## *Knowledge Economy Developments*

News Summaries

### **European Commission adopted changes to cut red tape for researchers and SMEs**

European Commission has adopted measures to make participation in the EU's current Seventh Framework Programme for Research more attractive and more accessible to the best researchers and most innovative companies, especially Small and Medium-Sized Enterprises (SMEs). The Commission adopted three concrete measures, each of these steps responds to concerns repeatedly expressed by participants and would-be participants in FP7. Allowing more flexibility in how personnel costs are calculated so that EU research grant-holders can apply their usual accounting methods when requesting reimbursement for average personnel costs. They will no longer need to set up entire parallel accounting systems just for this purpose. SME owners whose salaries are not formally registered in their accounts can now be reimbursed, through flat-rate payments, for their contribution to work on research projects. A new steering group of senior officials from all the Commission departments and agencies involved will remove inconsistencies in the application of the rules on research funding.

More:

[Commission decision](#)

and

[Web page Documents for FP7](#)

### **The future of the Competitiveness and Innovation Framework Programme (CIP)**

A conference on the future of the Competitiveness and Innovation Framework Programme (CIP) measures took place on Tuesday 25 January 2011

in Brussels. The CIP will come to an end in 2013 and the Commission services are currently elaborating actions and priorities to support the competitiveness of European businesses after 2013. Some main messages from the conference are: Most measures of the current CIP work well. The need for continuity and

stability of actions was underlined. There are many different ways in which European funding can add value such as exchange of best practices, bringing together relevant stakeholders or actions reducing the fragmentation of the EU internal market which are difficult to measure in

monetary terms. The differences between support for research and support for innovation

were underlined as was the need to bridge the gap between research, innovation and

market uptake in the case of technological innovation. There is clear EU value-added in the development of a European venture capital market, as well as in providing loan facilities and quasi equity measures (such as "mezzanine" credit) to support highly innovative SMEs. There should also be a place for support to more traditional SMEs and therefore the continued need for guarantees was underlined. Synergies with Structural Funds should be improved and the potential of regions as multipliers should be better used. The Competitiveness Council adopted conclusions on Innovation Union for Europe, where it calls for relevant future EU funding programmes, notably CIP and Structural Funds to focus more on the priorities of the Europe 2020 Strategy.

More

[Main messages](#)



and

[Web page of the conference](#)

and

[Competitiveness Council conclusions](#)

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## New Innovation Union Scoreboard

Although the trends in most EU Member States are promising despite the economic crisis, progress is not fast enough. While the EU still maintains a clear lead over the emerging economies of India and Russia, Brazil is making steady progress, and China is catching up rapidly. Within the EU, Sweden is the most impressive performer followed by Denmark, Finland and Germany. The UK, Belgium, Austria, Ireland, Luxembourg, France, Cyprus, Slovenia and Estonia, in that order, form the next group. These are some of the main conclusions from the 2010 Innovation Union Scoreboard. The Scoreboard feeds into the recently published Annual Growth Survey to help Member States identify strengths and weaknesses and to boost innovation performance through their Europe 2020 National Reform Programmes. Over the last five years, the strongest growth of the EU27 innovation indicators has been in open, excellent and attractive research systems (international scientific co-publications, high-impact publications, non-EU doctorate students) and intellectual assets (Community trademarks, PCT patents and Community designs).

More:

[The Report](#)

and

[Web page Innovation](#)

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## EU research and innovation funding: Commission consults on changes

The European Commission launched a consultation on improvements to EU research and innovation funding to make participation easier, increase scientific and economic impact and improve value for money. The proposed “Common Strategic Framework”, set out in a Green Paper, would cover the current Framework Programme for Research (FP7), the Competitiveness and Innovation Framework Programme (CIP) and the European Institute of Innovation and Technology (EIT). This will create a coherent set of instruments, along the whole “innovation chain” starting from basic research, culminating in bringing innovative products and services to market, and also supporting non-technological innovation, for example in design and marketing. The Commission’s Green Paper also provides the basis for far-reaching simplification of procedures and rules. The changes aim to maximise the contribution of EU research and innovation funding to the Innovation Union and the Europe 2020 Strategy. Stakeholders have until 20 May 2011 to respond.

More:

[The Green paper](#)

and

[Consultation on the Green Paper](#)

and

[Questionnaire](#)

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## The High Level Expert Group on Key Enabling Technologies presented its mid-term working document

Key Enabling Technologies (KETs) - photonics, micro- and nanoelectronics, nanotechnology, advanced materials, industrial biotechnology and advanced manufacturing systems - play a vital role in



modernising our industrial base and making the EU more competitive. Going from early development to commercialisation is highlighted as the main challenge. While Europe's strengths lie in strong state-of-the-art research and demand, its weakest point is the transition from technology to large scale demonstrations and production. To bridge this "innovation gap" the High Level Expert Group is preparing a series of recommendations to be presented in July 2011.

More:

[Mid-term working document](#)

and

[Web page KET](#)

and

[Web page High Level Expert Group](#)

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## EU-backed culture projects benefit innovation and public services

At a time when many of Europe's businesses are facing difficulties, the cultural and creative industries - contributing nearly 3% to the EU's GDP - have experienced unprecedented growth. The projects European Commission deduced highlighting demonstrate that culture-based creativity can bring benefits for many other sectors, supporting innovation in business, public services and responses to social needs. The IMAGINE 2020 - seeing climate change through art project - backs associations which are supporting artists who tackle the issue of climate change through art and who present environmentally sustainable performances. Festival d'Art Lyrique d'Aix-en-Provence incorporates the European academy of music, provides training and guidance for young European artists. The European Media Art Network supports experimental film, sound and computer-based artists.

More:

[Brochure with projects](#)

and

[Culture programme](#)

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## Service innovation has the potential to transform European businesses

Service innovation matters and can make a real contribution to Europe achieving its 2020 goals of smart, sustainable and inclusive growth. This was the key message at the conference organised by Confindustria in Rome on "Meeting the Challenges of Europe 2020: The transformative Power of Service Innovation". The Expert Panel on Service Innovation in the EU presented its conclusions which show that business is becoming increasingly aware of the way in which service elements and service innovation transforms value chains and their own position within them. Service innovation is important to companies of all sizes, not least to small businesses with limited resources for research and product development. The report acknowledges that considerable focus has rightly been given to creating a Single Market for services, but that industrial and innovation policy at the European, national and regional level needs to be similarly geared towards services.

More:

[Report and recommendations of the Expert Panel](#)

and

[Case studies](#)

and

[Web page Innovation in the services sector](#)

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## EU Council conclusions on innovation

The European Council on 4 February called for the implementation of a strategic and integrated approach to boosting innovation and taking full advantage of Europe's intellectual capital, to the benefit of citizens, companies - in particular SMEs – and researchers. It will monitor progress in the framework of the follow up to the Europe 2020 Strategy. It invited the Commission to quickly develop a single integrated indicator to allow a better monitoring of progress in innovation. It will keep developments concerning the above under review. In conducting fiscal consolidation, Member States should give priority to sustainable growth-friendly expenditure in areas such as research and innovation, education and energy. In conducting fiscal consolidation, Member States should give priority to sustainable growth-friendly expenditure in areas such as research and innovation, education and energy.

More:

[Council conclusions](#)

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## DEMETER project - The costs of a non-innovative Europe

It provides quantified insights on some key questions related to European R&D and innovation (RDI) policies including the role of RDI to emerge from the crisis. Simulation of the crisis by NEMESIS econometric model shows a lasting crisis partly due to R&D drop: the GDP gap of 8.7% lasts after 2011 and increases even more after 2020. The employment gap is about 3%. An active R&D and innovation policy that would increase R&D efforts steadily up to 3% of GDP in 2020 could fill the employment gap as early as 2015 and reduce almost half of the GDP gap in 2025. Up to now the main purpose of European policies has been to increase the leverage of such EU funding on national research budg-

ets. Many of the new initiatives under the heading of "joint" technology initiatives and research programming have contributed to increasing such leverage. However, the main policy question in a crisis period such as the current one, is whether the FP R&D support system could have a higher leverage on private R&D funding. Currently, the EC uses alternative funding instruments to a limited extent. The Risk-Sharing Finance Facility (RSFF) represents a first "European scale programme" by the European Commission (EC) which uses debt-based finance, to complement its more traditional FP 7 grant financing for RDI. The expert group on RSFF e.g. did propose that a substantially larger amount than the current € 1 billion coming out of FP7 would be devoted to RSFF in the near future under the FP8.

More:

[The costs of a non-innovative Europe](#)

and

[The costs of a non-innovative Europe: Challenges ahead](#)

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## Ageing is at the forefront of European research

ERA-AGE 1 consolidated skills and knowledge to coordinate ageing research and got a multi-disciplinary European Research Area (ERA) in the field of ageing research off the ground. ERA-AGE 2 was initiated to ensure the ERA's benefits in the ageing field in the long term. ERA-NET scheme was the tool for ERA-AGE as it effectively brings together national research organisations, such as ministries and research councils, in a coordinated effort. ERA-AGE 1 and 2 contributed to the creation of the ERA in a number of ways: bringing together partners in a consortium to share knowledge and good practice in mounting ageing research programmes (creating the foundation for the ERA); launching



the successful FLARE ('Future leaders of ageing research in Europe') postdoctoral programme, which was designed to address the capacity building issue, engaging all major stakeholders (in biological research, medicine and sociology) in discussion about ageing research priorities; planning Europe's first research programme in this field. With almost EUR 1.7 million in financial support, ERA-AGE 1 and 2 brought together experts from Austria, Bulgaria, Finland, France, Israel, Italy, Latvia, Luxembourg, Romania, Sweden and the UK. The first formal request to set up an European Research Infrastructure Consortium (ERIC) has been received by the European Commission on 20 December 2010. Austria, the Czech Republic, Germany and The Netherlands have decided to join forces to build SHARE-ERIC, an infrastructure of micro data of households and individuals necessary to understand individual and societal ageing. The European Commission adopted first Interim Evaluation of the Ambient Assisted Living Joint Programme (AAL JP). The AAL JP focuses on applied research with a two-to-three year time-to-market of ICTbased products and services for the elderly population.

More:

[ERA-AGE](#)

and

[The ERA-NET Scheme](#)

and

[Joint programming](#)

and

[ERIC](#)

and

[Interim review of the AAL JP](#)

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## **"Gazelles" as drivers for job creation and innovation: How to best support them?**

An important lesson from the special report of the Sectoral Innovation Watch on "gazelles" is that such high-growth companies can be observed in many sectors and not only in high-tech industries. Quite often, such success stories are driven by non-technological innovation, which allows also those Member States and regions to benefit from them that do not possess a strong research base.

More:

[Input Paper to the workshop](#)

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## **Fostering Creative Industries in Europe**

The European Commission's Enterprise and Industry Directorate-General revealed the objectives, approach and structure of the planned initiative for establishing a "European Creative Industry Alliance". Specific attention will be paid notably to the three key areas of innovation support services, incubation & access to finance, and cluster excellence & cooperation. The Commission intends to support a transnational consortium of six partners for establishing and managing the Cooperation Platform and working groups as well as launching awareness raising actions and information and guidance services for enterprises in creative industries. The Committee on Industry, Research and Energy in European parliament stresses the need for a more advantageous fiscal and investment climate, which would involve reconsidering current VAT rules (including the huge divergence between online and offline rates) and a widening of the scope of current tax shelter schemes. The Committee also points out that venture capital/private equity/business angel/mezzanine-type investments are the most relevant forms of financing, and suggests using the framework of the ECIA (European Creative Industries Alliance) to provide a platform for access



to information and advice on investment readiness and long-term business strategies. The Committee on Culture and Education, as the committee responsible for preparing a resolution for European parliament, on 24 January 2011 plans the presentation of draft report on "Creative and cultural industries". The report will focus, among other things, on the promotion of cultural diversity through the mobility of cultural and creative works, artists and cultural practitioners, and on the improvement of cultural and creative industries' access to finance. It is planned that the draft report will be adopted on 3 March.

More:

[Green paper](#)

and

[Draft opinion of the Committee on Industry, Research and Energy \(ITRE\)](#)

and

[Webpage Creative industries](#)

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## The future of the Competitiveness and Innovation Framework Programme (CIP)

The Competitiveness and Innovation Framework Programme (CIP) will come to an end in 2013 and the Commission services are currently elaborating actions and priorities to support the competitiveness of European businesses after 2013. Any successor to the CIP 2007-2013 should have the potential to highlight the importance of competitiveness-related expenditure outside the research area. Depending on the final design, the role of a possible successor programme may be to underpin a number of 'Europe 2020' flagship initiatives: 'Innovation Union', 'Industrial policy for the globalisation era', 'A digital agenda for Europe', 'Resource efficient Europe' and 'An agenda for new skills and jobs'. The Commission is therefore seeking the

best ways of addressing the key challenges: how EU programmes can better support enterprises, in particular SMEs, how to foster competitiveness and innovation in sectors with major development potential, how to stimulate a wider uptake of innovative ICT-based services and the exploitation of digital content across Europe, How to promote the use of renewable energies and energy efficiency. The Competitiveness Council adopted conclusions on Innovation Union for Europe, where it calls for relevant future EU funding programmes, notably the Framework Programme for

Research and Technological Development, Competitiveness and Innovation Framework

Programme (CIP) and Structural Funds to focus more on the priorities of the Europe 2020 Strategy.

More:

[Background document to the public consultation on a possible successor programme to CIP](#)

and

[Online survey](#)

and

[Competitiveness Council conclusions](#)

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## ENIAC and ARTEMIS interim evaluation

The European Commission has endorsed a report by a panel of independent experts which calls on EU industry and Member States to reinforce their support for ARTEMIS and ENIAC, two public-private partnerships (established as Joint Undertakings) for collaborative research in the fields of nanoelectronics and embedded systems (used widely in cars, smart phones, power plants and elsewhere. They also found that more financial resources are needed from EU Member States and that industry needs to demonstrate a stronger commitment towards a European strategy if ARTEMIS and ENIAC



are to realise their full potential.

More:

[Webpage ENIAC and ARTEMIS interim evaluation](#)

and

[ARTEMIS](#)

and

[ENIAC](#)

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## **A plan for vocational training in Europe over the next ten years**

Ministers of Education of 33 European countries (EU-27, Croatia, the former Yugoslav Republic of Macedonia, Iceland, Liechtenstein, Norway and Turkey), representatives of employers and unions and the European Commission discussed and confirmed shared objectives for vocational education and training for 2011-2020. In addition, they agreed an action plan with concrete measures at national level and support at European level for the coming four years. The Bruges Communiqué is the latest revision of the Copenhagen Process for European co-operation on vocational education and training. Ministers responsible for education adopted Council conclusions where they acknowledge vocational education and training should also play its part in achieving the two headline targets set in the education field, namely - by 2020 - to increase the percentage of 30-34 year olds that graduate from tertiary or equivalent education to at least 40%, and to reduce the share of early school leavers to below 10 %. European cooperation under the Copenhagen process should contribute to the development of a European area of education and training, where qualifications acquired in one country are recognised in other European countries, in order to promote the mobility of young people and adults.

More:

[The Bruges Communiqué](#)

and

[Website of the Copenhagen Process](#)

and

[Council conclusions](#)

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## **Innovation Union: three new European research infrastructures**

Three new pan-European energy research infrastructures were announced. A wind research facility is planned in Denmark, a concentrated solar power installation in Spain and a nuclear research reactor in Belgium. The overall investment is about € 1.2 billion. They will be part of the Roadmap of the European Strategy Forum on Research Infrastructures (ESFRI). In its updated Roadmap 2010, ESFRI has identified 50 new research infrastructures or major upgrades of existing ones, in order to stay at the forefront of research over the next 10 – 20 years. Their total construction cost amounts to some € 20 billion and their operational cost would be around € 2 billion per year. One of the objectives of the Innovation Union is to launch by 2015 the construction of 60% of these priority European research infrastructures, primarily financed by EU Member States, but with the support of European Programmes.

More:

[ESFRI](#)

and

[EU-SOLARIS project](#)

and

[Windscanner project](#)

and



[MYRRHA project](#)

and

[Council conclusions on joint programming in research](#)

and

[Council conclusions on “Cross fertilization between Europe 2020 flagship initiatives Digital Agenda for Europe and Innovation Union](#)

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## Ministers move forward on EU patent

At Competitiveness Council, 11 Member States stated their agreement to work to implement the European patent via the procedure of enhanced cooperation. The idea of creating a single European patent was first mooted back in 1949. However, getting Member States’ agreement on this thorny subject has, until now, proven impossible. The 11 countries interested in using enhanced participation for the patent issue are: Denmark, Germany, Estonia, France, Lithuania, Luxembourg, the Netherlands, Slovenia, Finland, Sweden and the UK. Other countries may join the system later if they wish. The Commission will come forward in 2011 with detailed proposals for implementing enhanced cooperation for unitary patent protection, including translation requirements.

More:

[Commissions’ proposal](#)

and

[Council decision](#)

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## Supporting European Enterprise and Industry in the Global Economy

DG Enterprise and Industry published a brochure, which gives an overview of international activities,

ranging from information services for SME to improving the business environment in neighbouring countries and cooperating with major trading partners to reduce the costs imposed by differences in regulations.

More:

[The brochure](#)

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## Integrated industrial policy for the globalisation era

In order to promote a successful industrial policy in our fast changing world, the European Commission has set out a strategy that aims to maintain and support a strong, diversified and competitive industrial base in Europe. It identifies several key areas where action is needed to boost the competitiveness and sustainability of European manufacturing. The strategy outlines a number of measures for promoting creation of SME, their growth and internationalisation. The new policy aims to upgrade Europe’s communication, transport and energy infrastructure and services in order for them to serve industry more efficiently. In light of the growing scarcity of and increased global competition for primary raw materials, the document also announces a strategy for their sustainable supply and management. Following discussion at the Council and the European Parliament, the first elements of the new strategy are expected to be implemented in 2011. The Competitiveness Council in its conclusions underlines the need to develop a new “European sustainable industrial competitiveness policy”, that brings together a horizontal basis and sectoral applications pursuing a global, integrated and balanced approach to industrial competitiveness, taking into account internal and external dimensions of competitiveness, and based on a strong multi-level governance. It underlines also the necessity to develop strong synergies between the industrial policy flagship and other relevant flagship



initiatives, as well as with the Small Business Act, the Single Market Act and Smart Regulation for Europe, and to mobilise all EU policies, such as competition, trade, transport, energy, environment and climate action, social and employment, education and training, cohesion, and consumer-protection policies in order to achieve the objectives of the Europe 2020 strategy. The Council invites the Commission, the Member States and their Regions, as well as all relevant stakeholders, to engage themselves, in an effective and timely way, in the development and implementation of the proposals set out in the Communication.

More:

[The strategy](#)

and

[Webpage](#)

and

[Council conclusions](#)

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## SMEs and the environment in the EU

The Commission has published a study on SMEs and the environment in the EU. The report estimates the environmental impact from SMEs in Europe and analyses the administrative burdens from EU environmental legislation and the business opportunities for SMEs with concrete examples from 13 European countries. The study comes with a web based toolkit to assist policy-makers and SMEs in developing environmental improvements. A database allows the user to compare the environmental impact of certain indicators among Member States and within a specific industrial sector per type of company.

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More:

[The Report](#)

and

[Case studies](#)

And

[Toolkits](#)

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## Commission presents Report on how the European Company Statute works for business

The European Commission has presented a Report on the application of the Regulation on the Statute for a European Company (Societas Europaea or SE). In theory, the Statute gives companies operating in more than one Member State the option of establishing themselves as a single company under EU law. This would make them able to operate throughout the EU with one set of rules, including a unified management and reporting system. The Report analyses the main problems encountered when setting up and running an SE. An accompanying Commission Staff Working Document supplements the assessment. It takes inventory of SEs and analyses the flexibility of relevant national legislation in the different Member States.

More:

[The report](#)

and

[Website of SE](#)

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## Recently published documents

To access any of the following publications, simply click on the title or cover page of the publication. Additional January/February 2011 publications can be found on [the KEN website](#).

[The Global Gender Gap Report 2010](#)



[The EU provisions on social security - Your rights when moving within the European Union](#)



[European Employment Observatory Review - Self-employment in Europe](#)



[Promoting equality: activities on fighting discrimination in 2009](#)



[Women in science](#)

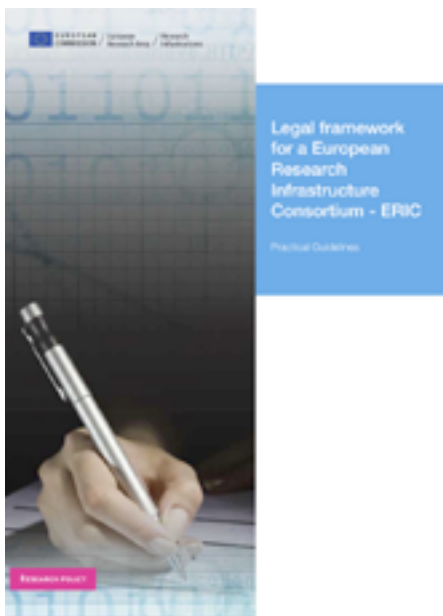


[Financial rules in the research framework programmes - Streamlining rules for participation in EU research programmes](#)





Legal framework for a European Research Infrastructure Consortium - ERIC : practical guidelines



100 years of educational reforms in Europe - A contextual database



Risk management in the procurement of innovation - Concepts and empirical evidence in the European Union : expert group report



A vision for strengthening world-class research infrastructures in the ERA - Report of the Expert Group on Research Infrastructures



Sustainable development indicators - An overview of relevant Framework Programme funded research and identification of further needs in view of EU and international activities



The role of community research policy in the knowledge-based economy - Expert group report





Drivers and policies for increasing and internationalising R&D activities of EU MNEs



Financing constraints and R&D investments of large corporations in Europe and the USA



Skills supply and demand in Europe - Medium-term forecast up to 2020



The EU's neighbouring economies - Emerging from the global crisis





## Articles on Key Topics

### The Nordic area above the Polar circle – a new ocean with direct route to China, but with global implications

Written by Thomas Friis Konst, KEN Vice Chair

#### Short introduction

In the last issue of EREF Bulletin it was mentioned that in the coming issues several articles concerning Scandinavia and Nordic matters should appear. In this issue the area in the far North of Scandinavia will be introduced, also referred to as the Polar circle. When talking about Scandinavia the area above the Polar circle on 66° North has not always been in focus. See map A - which shows the geographical area divided into several national interest spheres.



However, after a time with high energy prices and the indications of the melting ice some have indicated the reality of a “new ocean” in the far North. Moreover some investigations indicate huge energy and raw material deposits which are now becoming accessible. Actually, the melting ice and higher temperatures in general have opened the possibility for a new maritime trade route to the East!

Who are the main actors in this new ocean, and what are their policies concerning energy, R&D, defense and security interests or other policy areas? This “new ocean” can become even five times bigger than the Mediterranean Sea. See map B – which shows a possible new maritime transport route to China.



After a recent visit of the KEN Vice-Chair in the areas above 66° North three articles will be presented in the coming 3 bulletins;

- -Norway and Denmark with their long lasting economic interests of mining on Spitsbergen and several responsibilities on Greenland;
- Russia as the main energy supplier and in charge of a new maritime route to the new economic giant China, with demand on quick transport options world wide;



- Canada and United States with scientific observations and military activities in and around the “new ocean”.

In the coming articles the thematic aspects in this respect will be such as:

- Energy, concerning new gas sources and gas transport lines, oil reserves, other minerals etc.
- Economic development, concerning tourism, season regulations, new cruise ship lines etc.
- Environment, concerning nature protec-

tion, protected animals, fish regulations, fauna observations etc.

- Scientific research, concerning global warming, melting ice, raising sea level, new observation stations etc.
- Military matters, concerning F-16 support bases, ports for submarines, nuclear danger etc.

Moreover, several institutions and organizations from various countries active in the area, will be presented with direct links to further information sources.

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## *Upcoming events*

Below you will find a selection of the most pertinent events taking place in the coming two months. For more events, please visit [our online interactive calendar](#).

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### **February 2011**

#### **2011 EFMD Entrepreneurship Conference**

Date: 21 - 22 February 2011

Venue: Tallinn, Estonia

Host: European Foundation for Management Development

[Further information](#)

#### **Intangible Capital and Innovation: Drivers of Growth in the EU**

Date: 22 – 23 February 2011

Venue: Brussels, Belgium

Host: Centre for European Policy Studies

[Further information](#)

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#### **Sixth Territorial Dialogue for Smart, Sustainable and Inclusive Growth**

Date: 22 February 2011

Venue: Brussels, Belgium

Host: Committee of the Regions of the European Union

[Further information](#)

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#### **Austerity, Economic Governance Reforms and Social Policies in Europe**

Date: 22 – 23 February 2011

Venue: Brussels, Belgium

Host: European Trade Union Institute

[Further information](#)



## Teaching the innovation process – how it can support SME innovation capacity

Date: 23 February 2010

Time: 13:30 - 17:00

Venue: Brussels, Belgium

Host: Making Knowledge Work and ERRIN

[Further information](#)

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## The Indirect Returns of Technopols in Lower Austria

Date: 23 February 2011

Time: 12.30 - 13.30

Venue: Brussels, Belgium

Host: Lower Austrian Minister for Business and Technology and Regional Business Agency

[Further information](#)

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## The Contribution of Culture to the Implementation of the Europe 2020 Strategy

Date: 27 February – 1 March 2011

Venue: Budapest, Hungary

Host: Hungarian Ministry of National Resources

[Further information](#)

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## Human Capital in Regions and Cities: Drivers for Sustainable Growth and Jobs

Date: 28 February 2011

Time: 14.00 – 17.30

Venue: Brussels, Belgium

[Further information](#)

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## Information day on the 5th Call for Proposals

Date: 28 February 2011

Time: 10.30 – 16.30

Venue, Brussels Belgium

[Further information](#)

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## March 2011

### European Research Area in Ageing 2

Date: 1 March 2011

Venue: Vienna, Austria

Host: Austrian Academy of Science

[Further information](#)

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### EU Funding at your Fingertips “New and improved”

Date: 2 March 2011

Venue: Brussels, Belgium

Host: European Training Institute

[Further information](#)

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### The European Research Landscape and the “Innovation Union”

Date: 2 March 2011

Venue: Brussels, Belgium

Host: European Association of Research Managers and Administrators

[Further information](#)

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## **World Sustainable Energy Days 2011**

Date: 2 – 4 March 2011

Venue: Wels, Austria

[Further information](#)

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## **Managing the Project Pipeline: Generating Good Projects for Successful EU Structural Funds Programmes**

Date: 2 – 4 March 2011

Venue: Maastricht, Netherlands

Host: European Institute of Public Administration

[Further information](#)

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## **Innovation in the Transatlantic Relationship: Unlocking the Potential of a 21st Century Economy**

Date: 3 March 2011

Venue: Brussels, Belgium

Host: American Chamber of Commerce to the European Union

[Further information](#)

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## **How to get the European economy back on track**

Date: 4 March 2011

Time: 09.00 – 13.00

Venue: Brussels, Belgium

Host: Centre for European Policy Studies

[Further information](#)

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## **Women in Science, Innovation and Technology in the Digital Age**

Date and Time: 6 March – 8 March 2011

Venue: Budapest, Hungary

Host : Hungarian EU Presidency and the European Commission DG INFSO

[Further information](#)

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## **South East Europe in 2011 and Beyond: Sharing the Same Vision**

Date: 7 March 2011

Time: 18.00 – 21:00

Venue: Sarajevo, Bosnia and Herzegovina

Host: Regional Cooperation Council

[Further information](#)

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## **New post-Lisbon Comitology**

Date: 8 March 2011

Venue: Brussels, Belgium

Host: European Training Institute

[Further information](#)

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## **Working with Comitology after Lisbon: The New Rules on EU Implementing and Delegated Acts**

Date: 10 March 2011

Venue: Brussels, Belgium

Host: European Institute of Public Administration

[Further information](#)

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## **Successful R&D in Europe - 3rd European Networking Event**

Date: 10 – 11 March 2011

Venue: Düsseldorf, Germany

Host: North Rhine-Westphalia

[Further information](#)

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## **Statistics for Policymaking: Europe 2020**

Date: 11 March 2011

Venue: Brussels, Belgium

Host: Eurostat

[Further information](#)

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## **FP7 - Financial Reporting & Audits**

Date: 11 March 2011

Location: Budapest, Hungary

Host: Europa Media

[Further information](#)

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## **Innovation and Knowledge Driven R&D for Future Agriculture and Health**

Date: 15 March 2011

Venue: Brussels, Belgium

[Further information](#)

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## **Fraunhofer IME Science Seminar at the European Parliament**

Date: 15 March 2011

Time: 10.00 – 13.00

Venue: Brussels, Belgium

[Further information](#)

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## **2nd Interactive Supply/Demand Chain Workshop**

Date: 15 – 16 March 2011

Venue: Brussels, Belgium

[Further information](#)

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## **What Future for Cohesion Policy? An Academic and Policy Debate**

Date: 16 – 18 March 2011

Venue: Bled, Slovenia

[Further information](#)

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## **IT World Talent Forum: Innovation and Creative Talent**

Date: 17 March 2011

Venue: Pamplona, Spain

[Further information](#)

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## **Measuring Effectiveness in R&D**

Date: 18 March 2011

Venue: Berlin, Germany

[Further information](#)

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## **Brazil, Russia, India, China. Key points on the European higher education compass?**

Date: 18 March 2011

Venue: Brussels, Belgium

[Further information](#)

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## **Lille Innovation Conference**

Date: 21 March 2010

Venue: Lille, France

[Further information](#)

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## **Symposium on Transatlantic EU-U.S. Cooperation on Innovation and Technology Transfer**

Date: 22 March 2011

Venue: Vienna, Austria

Host: Austrian Federal Economic Chamber

[Further information](#)

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## **The Future of Banking: Restoring trust, reducing risk, reinventing business models**

Date: 22 March 2011

Venue: Paris, France

[Further information](#)

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## **Can the Eurozone be stabilised or will EMU break up?**

Date: 23 March 2011

Time: 13.15 – 14.30

Venue: Brussels, Belgium

Host: Centre for European Policy Studies

[Further information](#)

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## **International working conference on enterprise interoperability**

Date: 23 March 2011

Venue: Stockholm, Sweden

[Further information](#)

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## **Chains of Migration: Migration and Identity in the Post-Yugoslav Countries**

Date: 25 – 26 March 2011

Venue: Ljubljana, Slovenia

Host: Faculty for Social Work, University of Ljubljana and Austrian Science and Liason Office Ljubljana

[Further information](#)

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## **ASSISES Research & Enterprise**

Date: 28 March 2011

Time: 09.00 – 17.30

Venue: Reims, France

[Further information](#)

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## **PERIA conference: Regional Innovation Agencies**

Date: 29 March 2011

Time: 10.00 – 16.00

Venue: Reims, France

Host: Partnership on European Regional Innovation Agencies

[Further information](#)

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## **Innovation in Healthcare: from Research to Market**

Date: 30 – 31 March 2011

Venue: Brussels, Belgium

[Further information](#)

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## **April 2011**

### **Practical Guide to the EU Labyrinth**

Date: 4 – 7 April 2011

Venue: Brussels, Belgium

Host: European Training Institute

[Further information](#)

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### **Innovation Conference: Can Greece recover from the economic crisis without broadband technology?**

Date: 6 April 2011

Venue: Athens, Greece

[Further information](#)

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## *Knowledge Economy good practice cases*

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### **Danish PhD Programme for Business: Promoting Research with Commercial Perspectives**

**That is an ambitious aim being successfully implemented for several years: to educate e scientists with an insight in the commercial aspects of R&D, increase R&D and innovative capacities in private companies and to build networks disseminating knowledge between universities and private companies. It puts the Danish Industrial PhD - a national programme funded b the Ministry of Science, technology and innovation – on the European map among the excellent examples of good practices academy and business collaboration.**

Taking into account the advantage of competences and research facilities in private business, in order to realize the described purpose, the Industrial PhD students typically spend 50 percent of their time in a company and 50 percent of their time at a university while taking the degree. The Danish Agency for Science, Technology and Innovation (DASTI) subsidises the Industrial PhD's salary with a fixed monthly amount, roughly corresponding to 30-50 percent of the Industrial PhD's total salary.

The Industrial PhD programme was initiated in 1971 under the name "The Industrial Researcher Programme". In 1988 it was made possible to qualify for a PhD degree when graduating. The programme was subsequently reformed to comply with Danish PhD regulations, making every graduate a formal PhD graduate. Until 2009, approx. 1,200 projects have been started.

#### **What is an Industrial PhD?**

An Industrial PhD education is a three-year industrially focused PhD research and training programme with an industrial focus conducted jointly by a private company, an Industrial PhD student and a university. According to the guidelines, that entered in

force on 15 December 2010, The student is hired by the company and enrolled at the university at the same time. The company receives a monthly wage subsidy of currently DKK 14,500 (approx. €2,000) while the university has its expenses for supervising etc., covered. The PhD student works full time on the project and divides his or her time equally between the company and the university. There are additional subsidies available for project-relevant stays abroad. Currently, there are allocated annually approx. DKK 100-150 million (€15-20 million) for new projects. Approval rates for applications are currently above 60 percent.

If an application is approved, the parties to the project will receive a letter of commitment from DASTI. The letter of commitment contains the formal requirements for the parties during the Industrial PhD project and constitutes the contract with DASTI.

During the project period, the company pays the student's salary and receives a wage subsidy from DASTI. The university receives a subsidy to cover supervision and other expenses related to the enrolment of the student. As a starting point, the student must divide his or her time equally between the company and the university. Accordingly, the student is supervised by at least two supervisors: a university supervisor from the university and a company supervisor from the company. In addition, one or more third-party supervisors may also be attached to the project. The university appoints all supervisors, although the company supervisor is appointed at the recommendation of the company. The university supervisor, the company supervisor and any third-party supervisor must be evident from and sign the application.

In addition to applications with a single named can-



didate per application, a company can apply for approval of up to five projects per application round without named candidates. Final approval of such a project is given on the condition that the company subsequently finds a qualified candidate, e.g. through job advertisements.

Public institutions may also apply for approval of an Industrial PhD project in cooperation with a university, subject to the general requirements of the guidelines. If funding has been allocated for this purpose, public institutions may apply for subsidy at indicated application rounds, to be announced beforehand at web page [www.erhvervsphd.dk](http://www.erhvervsphd.dk). If no funding has been allocated, public institutions must defray all expenses for the education, including expenses in connection with enrolment and supervision at the university.

And how the project starts? The first step when commencing an Industrial PhD project is to submit an application to the Danish Agency for Science, Technology and Innovation (DASTI). The application is drafted jointly by a company, a university and a candidate. The company is the formal applicant, since it is the company which upon approval of the project employs the candidate and acts as the host company for the project.

When the application is received by DASTI, it is assessed by the Industrial PhD Programme Committee (the Programme Committee), which is a professional advisory committee consisting of researchers from the private sector and public research institutions. An application for an Industrial PhD can obtain either approval, conditional approval or rejection. DASTI will publicise titles and participants of all approved and conditionally approved projects at the above mentioned web page within 45 working days after the application deadline. If an application receives a conditional approval or is rejected, DASTI will send a letter to the applying company detailing the conditions for approval or the reasons for rejection.

## Positive evaluations of the PHD programme

Different aspects of the Danish Industrial PhD programme have already been addressed in several evaluations in the past. For example, in 2007 DASTI concluded that Industrial PhDs were characterised by earning higher wages and were more likely to be a part of their organisation's management compared to regular PhDs. Companies hosting Industrial PhD projects expected increased patenting activity and growth. Not only the possibility to gain new knowledge, patents and licenses, but also growth and new market opportunities, and an increased network inside the academic world were listed among the positive benefits for the participating companies

The results of the recently published analysis of the Danish innovation policy - The Industrial PhD Programme and the Innovation Consortium Scheme\* - revealed the following even more interesting conclusions: industrial PhDs earn approximately 7-10 % higher wages than both regular PhDs and university graduates. They are more likely to be found at the top levels of their organisations' hierarchies compared to regular PhDs and more likely to be found in positions requiring high-level specialist knowledge than regular university graduates. Companies which host Industrial PhD projects see on average increasing patenting activity in association with hosting the projects. They are characterised by high growth in gross profit (value creation) and employment.

The comparison with a control group of highly similar control companies suggests that companies hosting Industrial PhD projects would have considerably less positive gross profit and employment developments if they did not participate in the programme.

There were not found robust differences in total factor productivity developments between companies which had hosted Industrial PhD projects and companies which had not. According to this evaluation report, this finding might be due to firm growth being negatively associated with productiv-



ity developments. The relative high wages of Industrial PhD graduates, on the other hand, indicate that they have high individual productivity.

Earlier studies which found that Industrial PhDs were characterised by positive labour market out-

comes have been corroborated. Findings on the company level indicate that the Danish Industrial PhD Programme also has positive effects for participating companies in terms of firm growth and patenting activity.

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## Select bibliography

*Prior to KEN Workshops, Analytical Compendia and Select Bibliographies are prepared for participants. Below you will find a selection of documents concerning Business Academia Collaboration.*

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## *Relevant indicators, statistics and graphs*

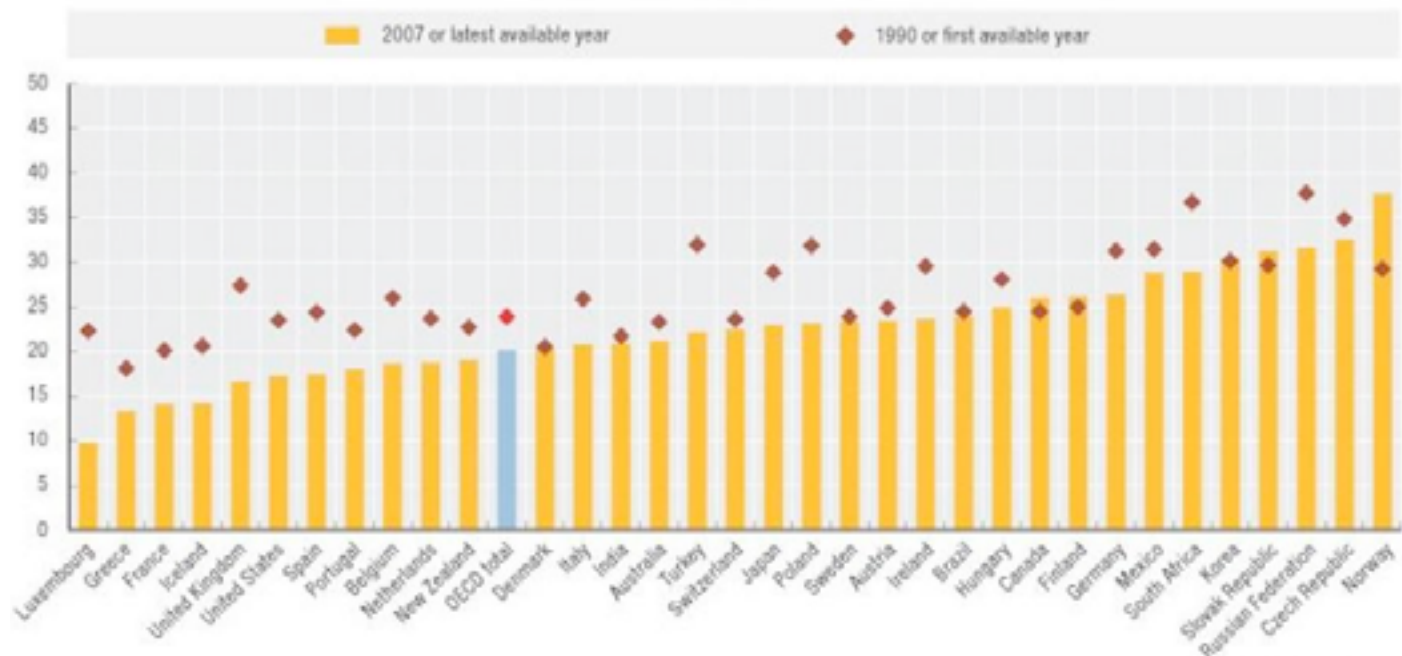
The 10 Most Innovative Companies according to Bloomberg’s BusinessWeek [Chart](#)

2010 Rank	2009 Rank	Company	HQ Country
1	1	Apple	North America
2	2	Google	North America
3	4	Microsoft	North America
4	6	IBM	North America
5	3	Toyota Motor	Asia
6	11	Amazon.com	North America
7	27	LG Electronics	Asia
8	Not ranked	BYD	Asia
9	17	General Electric	North America
10	14	Sony	North America

Note: Only two European companies appear in the top 20: Volkswagen and BMW.



## Value added in Industry (as a percentage of total value added)



Source: *OECD Factbook 2009*

## Total gross domestic product in billions of current US dollars | 2009

Rank	Country/Economy	Score
1	United States	14,256.3
2	Japan	5,068.1
3	China	4,909.0
4	Germany	3,352.7
5	France	2,675.9
6	United Kingdom	2,183.6
7	Italy	2,118.3
8	Brazil	1,574.0
9	Spain	1,464.0
10	Canada	1,336.4

Source: World Economic Forum, *Global Competitiveness Report 2010-11*

## Total population in millions | 2009

Rank	Country/Economy	Score
1	China	1,345.8
2	India	1,198.0
3	United States	314.7
4	Indonesia	230.0

5	Brazil	193.7
6	Pakistan	180.8
7	Bangladesh	162.2
8	Nigeria	154.7
9	Russian Federation	140.9
10	Japan	127.2

Source: World Economic Forum, *Global Competitiveness Report 2010-11*

## Gross domestic product per capita in current US dollars | 2009

Rank	Country/Economy	Score
1	Luxembourg	104,512
2	Norway	79,085
3	Qatar	68,872
4	Switzerland	67,560
5	Denmark	56,115
6	Ireland	51,356
7	Netherlands	48,223
8	United Arab Emirates	46,857
9	United States	46,381
10	Austria	45,989

Source: World Economic Forum, *Global Competitiveness Report 2010-11*



## World Economic Forum Questionnaire: How would you rate the protection of property rights, including financial assets, in your country?

[1 = very weak; 7 = very strong] | 2009–10 weighted average] | Mean average for all countries 4.4

Rank	Country/Economy	Score
1	Switzerland	6.4
2	Finland	6.4
3	Singapore	6.3
4	Hong Kong SAR	6.3
5	Sweden	6.3
6	Luxembourg	6.2
7	Austria	6.2
8	Germany	6.1
9	Norway	6.1
10	Canada	6.1

Source: World Economic Forum, [Global Competitiveness Report 2010-11](#)

## The evolution of public debt in G-7 and other country groups, 1950-2015



G-7 nations: Canada, France, Germany, Italy, Japan, United Kingdom, and the United States

Source: World Economic Forum, [Global Competitiveness Report 2010-11](#)



## *EU funding programmes & other related websites*

Executive Agency for Competitiveness and Innovation	<a href="http://ec.europa.eu/eaci">ec.europa.eu/eaci</a>
Your Europe	<a href="http://ec.europa.eu/youreurope">ec.europa.eu/youreurope</a>
CORDIS	<a href="http://cordis.europa.eu">cordis.europa.eu</a>
EUREKA	<a href="http://www.eureka.be">www.eureka.be</a>
TechWeb	<a href="http://ec.europa.eu/research/sme-techweb">ec.europa.eu/research/sme-techweb</a>
CIP	<a href="http://ec.europa.eu/cip">ec.europa.eu/cip</a>
EU funding for SMEs	<a href="http://ec.europa.eu/enterprise/policies/finance">ec.europa.eu/enterprise/policies/finance</a>
Welcome Europe	<a href="http://www.welcomeurope.com">www.welcomeurope.com</a>
Grants of the European Union	<a href="http://ec.europa.eu/contracts_grants">ec.europa.eu/contracts_grants</a>
The Seventh Framework Programme	<a href="http://cordis.europa.eu/fp7">cordis.europa.eu/fp7</a>
Scadplus	<a href="http://europa.eu/scadplus">europa.eu/scadplus</a>
EUR-Lex	<a href="http://eur-lex.europa.eu">eur-lex.europa.eu</a>
Marie Curie Actions	<a href="http://cordis.europa.eu/fp7/mariecurieactions">cordis.europa.eu/fp7/mariecurieactions</a>
European Investment Fund	<a href="http://www.eif.org">www.eif.org</a>
EuropeAid	<a href="http://ec.europa.eu/europeaid">ec.europa.eu/europeaid</a>
European Bank for Reconstruction and Development	<a href="http://www.ebrd.com">www.ebrd.com</a>
European Investment Bank	<a href="http://www.eib.org">www.eib.org</a>
Phare, Sapard, ISPA, Cards, EAR TACIS, MEDA	<a href="http://ted.europa.eu">ted.europa.eu</a>
Official Journal	<a href="http://eur-lex.europa.eu">eur-lex.europa.eu</a>