ISSN 1022-6559

Newsletter

Highlights 3 General policy 11
Projects and programmes 14 Innovation 18
Calls and tenders 22 Around Europe 23 Events 26
Other news 28 Also online 31 New on CORDIS 32

http://cordis.europa.eu

In this issue

- IST2006 Helsinki showcases state-of-the-art technology, page 6
- Norway: small country, big results, page 10
- Bringing neglected diseases in from the cold, page 12
- Improving Europe's drinking water, page 15
- Stakeholders release declaration on innovation, page 19





Publications Office Publications.europa.eu

EN

All systems go for FP7

'It's a great day', EU Science and Research Commissioner Janez Potočnik told journalists immediately after the European Parliament (EP) approved amendments to the Seventh Framework Programme (FP7) proposal that were drafted together with the Council. This will then enable the European Commission to publish the first calls for proposals on 22 December 2006 as planned.

FP7 is divided into four specific programmes. The 'Cooperation' programme will support research cooperation in a number of specified thematic areas. 'Ideas' will fund investigatordriven research through a newly created European Research Council (ERC). The 'People' programme will support training and researchers' career development, while 'Capacities' will support the coordination and development of research infrastructure, regional research clusters, international cooperation and closer ties between science and society.

The programme's budget of EUR 54.582 billion at current prices is a 'major improvement' according to Mr Potočnik. Of this, EUR 50.521 billion will go to the European Community programme, and EUR 2.751 billion



CUS

Janez Potočnik

to the Euratom programme ('Fusion energy research' and 'Fission and radiation protection'), which runs from 2007 until 2011. A further EUR 1.31 billion is fore-seen for Euratom for 2012 and 2013.

The final changes to FP7 correspond to the EP's priorities. Amendments submitted by rapporteur and Polish Member of the European Parliament (MEP) Jerzy Buzek ensure that children's health, respiratory diseases, neglected diseases and fisheries will receive funding; attempt to ease the participation of small and medium sized enterprises (SMEs); and give increased emphasis to the scientific training role of the Joint Research Centre (JRC).



Published by:

Office for Official Publications of the European Communities 2, rue Mercier L-2985 Luxembourg Fax (352) 29 29-44090 E-mail: cordis-focus@publications.europa.eu

CORDIS: Community Research and Development Information Service

CORDIS *focus* is also available at: http://cordis.europa.eu/news/focus

Based on information from CORDIS News available on the Web at: http://cordis.europa.eu/news



CORDIS focus is published by the Office for Official Publications of the European Communities as part of the European Community's Sixth Research Framework Programme and presents the latest news on European Union research and innovation and related programmes and policies.

Subscriptions and orders

CORDIS focus OPOCE B.P. 2201 L-1022 Luxembourg E-mail: cordis-focus@publications.europa.eu Online subscription at: http://cordis.europa.eu/news/focus/ subscribe_en.html

Submitting information to CORDIS

CORDIS is interested in receiving news or events linked to the R & D and innovation activities of the EU via its programmes and initiatives. Please submit your information to: cordis-news@publications.europa.eu Thank you.

The contents of this bulletin have been extracted from the CORDIS News database which is updated every day on http://cordis.europa.eu

© European Communities, 2006 — Reproduction is authorised, provided the source is acknowledged.

Legal notice: Neither the Office for Official Publications nor any person acting on its behalf may be held responsible for the use which might be made of the information contained in this publication, nor for any errors which may appear.

continued from page 1 'All systems go for FP7'

MEPs ensured that renewable energy research will be a priority by insisting that the 'major part' of the energy budget will go to renewables and end-use efficiency, with clean coal technologies and capture and storage receiving what is left.

'This sentence can only mean one thing: that the two sets of technologies will receive over half of the budget for non-nuclear research, meaning at least EUR 1 175 million over the seven years of FP7,' said Didier Mayer, President of the European Renewable Energy Research Centres (EUREC).

The amendments also adjust the budget slightly, with three of the four FP7 pillars ('Cooperation', 'Ideas' and 'People') increasing their funding envelopes slightly, and the fourth, 'Capacities', seeing a decrease.

There is also a change to the budget of the planned 'Risk sharing finance facility' (RSFF). The feature is intended to facilitate access to European Investment Bank (EIB) finance, allowing the funding of riskier research projects and leveraging more private funding in the process.

On the ERC, MEPs defended their request to have a mid-term review - something the Commission was originally against.

Jerzy Buzek praised the quality of the original Commission proposal, saying that the EP had changed a few things, but not the ideal behind the programme or its structure.

Mr Buzek also thanked his fellow parliamentarians for putting aside political preferences in the name of getting FP7 up and running. 'I hope that this will be a principal for future discussions in the Parliament,' he said.

One may be inclined to think that with the launch of FP7 now imminent, those that designed it will be looking forward to a well earned break. Messrs Potočnik and Buzek were far from giving this impression on 30 November 2006.

'We haven't finished yet. The work starts today', according to Mr Buzek. The next step is to implement the programme, he said.

.....

'We haven't finished yet. The work starts today.'

And then, 'we have to convince national governments, policy-makers, researchers, society that this is a good programme. We have to breathe new life into European research?

For Janez Potočnik, FP7 has undoubtedly been his biggest project since his appointment as Science and Research Commissioner in 2004. The programme may now be all but implemented, but that does not mean that his work is done. 'This is a nonstop, constant journey,' he said.

The Commissioner's focus is now longerterm. He told journalists to look out for a new debate on the European research area (ERA) in 2007. Then in 2009 there will be a debate on the financial perspectives of the EU. 'This will be connected with the debate on the future of Europe. We have to be prepared,' he said, prepared to illustrate to policy-makers exactly how important investment in research is for Europe's competitiveness.

> Based on CORDIS News attendance at an FP7 briefing. For further information on FP7, please visit: http://cordis.europa.eu/fp7 RCN: 26747



Energy and climate change at heart of European Commission's 2007 work programme

Commission President José Manuel Barroso has presented the European Commission's work programme for 2007, with energy and climate change heading the list of priorities.

'The "forces unleashed

presenting more shared

challenges than ever before.'

by globalisation" are

The 'forces unleashed by globalisation' are presenting more shared challenges than ever before, said Mr Barroso. Challenges come in the form of climate change, energy security or

international terrorism, but Europe has responded effectively, he said.

'We can be proud of our response so far to this rapidly changing landscape. First, we renewed the Lisbon agenda and placed the emphasis squarely on growth and jobs. As a result, it was possible to

restore confidence in the Stability and growth pact, putting it on a more realistic and workable footing,' said the Commission President.

Continuing his reflection on 2006, Mr Barroso highlighted efforts to support innovation: 'To ensure that Europe thrives in the knowledge economies of tomorrow, innovation became a central part of our economic and social strategies. The establishment of the European Institute of Technology [EIT] will help reverse the fragmentation of research, education and innovation efforts, which has stunted progress so far.'

Irish MEP Brian Crowley, responding to the presentation, was not impressed with the speed of reforms intended to promote innovation. 'When did it become a sin to be radical?', he asked. He said that progress towards the Lisbon goals had been too slow, and that there is 'still so much lacking', with more talk than action on research and innovation (R & I).

Naturally R & I will have a role to play in the European Commission priority areas of energy and climate change. In 2007 the Commission will present the first ever 'Strategic EU energy review', which will include proposals to accelerate the take-up of new, low-carbon technologies and to diversify supplies.

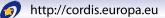
On climate change, the Commission will put forward options for an EU climate change policy and alternatives for international cooperation.

> Numerous research projects on energy and the environment are also likely to receive funding under the new FP7, due to be launched on 1 January 2007.

> > Based on a speech by José Manuel Barroso, SPEECH/06/683 and information from the EP. RCN: 26657



José Manuel Barroso



Frequent acronyms

| CIP | competitiveness and innovation framework |
|---------|---|
| | programme |
| CORDIS | Community Research and Development |
| | Information Service |
| EP | European Parliament |
| ERA | European research area |
| ERC | European Research Council |
| FP5/6/7 | Fifth/Sixth/Seventh Framework Programme |
| | of the European Community for research, |
| | technological development and demonstration |
| | activities |
| | |

| ICT | information and communication technology |
|-------|--|
| IP | integrated project |
| MEP | Member of the European Parliament |
| R&D | research and development |
| R & I | research and innovation |
| ~··- | |

SME small and medium-sized enterprise

Keeping up S & T ties with Europe

In addition to debating politics and showcasing some of Europe's state-of-the-art technology, the IST2006 event, held in Helsinki, Finland, from 21 to 23 November 2006, also offered delegates an opportunity to further develop international partnerships.

Among the many stands, delegations from the Western Balkans, the Baltic countries, China, Egypt, India, Israel, New Zealand, Russia and Singapore were present, highlighting existing links between their regions and Europe, and areas for further science and technology (S & T) cooperation.

CORDIS News spoke to representatives from South Africa and Canada, and asked them about their cooperation ties with Europe and their expectations of new partnerships following participation in IST2006.

Ever since South Africa emerged in the early 1990s as a fully-fledged democracy, the country has been working to re-establish itself in the world, building strong relations with Europe and elsewhere. 'One of the strategic priorities of the government was to reintegrate South Africa's research community with the international community, Daan du Toit, Senior S & T Representative to Europe, told CORDIS News. To this end, in 1996, the South African Government signed a formal bilateral S & T agreement with the EU.

An important component in this cooperation agreement was allowing South Africans to participate in the EU research Framework Programme, under the 'International science and technology cooperation' (INCO) section of the Fourth Framework Programme (FP4). After 10 years, this participation has grown, thanks to the opening up of all thematic areas to third countries under the Sixth Framework Programme (FP6).

Although the full statistics are not yet available, Mr du Toit estimates that from FP4 to FP6, there have been close to 200 South African participations. Thematic areas where South African participants have made inroads include food safety and quality, the environment and sustainable development, and life sciences.

The thematic area of 'Information and communication technologies' (ICT), however, has been a much harder nut to crack, says Mr du Toit, irrespective of the keenness among South African partners to participate in projects and the government's decision to make it one of their key strategic priorities. In total, South African partners participated in just five projects under the 'Information society technologies' (IST) section of FP6. However, 'given the fact that we started from a very low place, it is a modest but satisfactory start,' he said.

'We have empirical evidence that shows that by participating in the Framework Programme, South Africa has increased its S & T capacity,' said Mr du Toit. South Africa currently spends 0.87 % of its GDP on research and development (R & D) and aims to reach 1 % by 2008.

philosophy and we fully subscribe

to it,' he told CORDIS News, noting that South Africa has brought

its own expertise to projects in

areas such as communicable

diseases like HIV/AIDS and

But with ICT, 'while we have

good people working in the

sector in South Africa, they

are no better, nor worse than

say Belgians or Dutch,' he says. 'So when a [framework

programme] consortium,

say based in Germany, has

to choose between a partner

from the other side of the world, or someone based in

malaria.



Daan du Toit, South Africa's Sr. S & T Representative to Europe

Austria with the same quality of work, the decision is an easy one,' believes Mr du Toit.

From feedback received during a partnering session at the IST2006 event, organised by the South African delegation, Mr du Toit sees an obvious lack of awareness within the European research community on South Africa's ability to participate in the Framework Programme. He says that both Europe and South Africa should share the responsibility of sensitising their respective research communities to the opportunities for partnership under FP6 and FP7, and encouraging greater involvement.

With this in mind, the South African Department of Science and Technology, with funds from FP6, set up the 'European South Africa science and technology programme' (Esastap). The aim of the initiative

.....

The best way to keep the cooperation going is with face-to-face meetings like those happening at the IST event.'

is to enhance networking and partnering between the two regions. One of its instruments is a seed fund for South African researchers thinking of participating in FP6. With this financial support, researchers can go overseas and explore possible partnering opportunities. The initiative also offers coinvestment funding to successful South African participants in FP6 projects considered of strategic national importance.

'We also know that we have to market ourselves better and that is why we are here,' said Mr du Toit. He sees the IST2006 event as a great way of putting South African ICT expertise on the map. He noted that the country's strengths in open source developments and e-inclusion activities such as health and education could be useful to Europe.

Asked why S & T cooperation between Europe and his country was so important, Mr du Toit pointed out that only 0.5 % of R & D in the world is carried out in South Africa. 'Therefore we have to stay connected to where the other 99.5 % is taking place?

Europe also needs to be connected. 'With enlargement, the objectives of the EU have come closer to the objectives of South Africa, because in many ways we are grap-

continued on page 5

Finance ministers welcome progress on Lisbon objectives

EU Member States' finance ministers, meeting in the Ecofin Council in Brussels, Belgium, on 28 November 2006, have described the overall progress towards meeting the Lisbon objectives as 'encouraging', but have urged more to be done, particularly in fostering private R & D investment.

Discussing the implementation by Member States of national reform programmes (NRPs) for the period 2005–08, ministers welcomed many of the reforms which are already bearing fruit.

In particular, they looked favourably on the progress made by Member States in creating the right conditions for boosting Europe's innovation performance, pointing to efforts to increase research cooperation between industry and academy; developing a 'well-balanced and user-friendly' intellectual property rights system; and providing access to capital, especially for SMEs.

But Member States should not rest on their laurels just yet, ministers said. 'Europe

should make good use of the current relatively favourable economic outlook to build upon the reforms already underway and turn to the areas where progress remains limited, reads the Council's statement.

Ministers singled out the need to foster more private investment in R & D, alluding to the overall EU objective of becoming the world's most competitive economy by 2010. Particular attention, they said, should also be given to supporting innovation in the services sector and creating an innovationfriendly environment for companies. Furthermore, 'Member States should strive to maximise returns on innovation inputs by enhancing the quality of their policy measures, especially the effectiveness of public research expenditure,' reads the statement.

Also discussed was the need to increase employment, create a fully integrated single energy market, and maintain momentum on regulatory framework reform.

> Based on information from the European Commission. For further information, please visit: http://ec.europa.eu/growthandjobs/index_en.htm RCN: 26741





continued from page 4 'Keeping up S & T ties with Europe'

pling with the same economic and social challenges,' said Mr du Toit.

Another country — this time in the Northern Hemisphere — to see the advantages of working in close cooperation with Europe, is Canada. 'It's important to collaborate because you just can't go it alone,' Debbie Kemp, Canada's IST national contact point (NCP), told CORDIS News. 'By working together, your research is more likely to succeed and or go commercial, and it leads to more opportunities.'

Patricia Ockwell, S & T counsellor in the mission of Canada to the EU, agrees. 'Cooperation is all about working with the best people in the field. Why duplicate work happening somewhere else in the globe, when you can work together and get a solution faster and a better result?', she asked.

Like her South African counterpart, Ms Ockwell believes that cooperation allows both regions to join forces to tackle challenges which are common to both, such as an ageing population and rural development, thus sharing the risks and benefits. 'When I look at the thematic areas of FP6, I see that they very much match those of Canada,' she added. In 1995, Canada signed an S & T cooperation agreement with the EU, which permitted the country's researchers and research organisations to participate in consortia under the EU's research framework programme. When looking at recent statistics on the participation of Canadian researchers, the fruits of this agreement become evident.

Under the Fifth Framework Programme (FP5) alone, there were at least 75 Canada-Europe collaborative S & T projects, with the active involvement of about 80 Canadian researchers as well as several hundred EU researchers. Among those 75 projects, 28 were in the field of IST. A total of 38 Canadian organisations participated in the FP5 IST programme, with a majority of organisations coming from the public sector (75 %).

Going by comments from the IST2006 forum, areas of ICT where Canada is judged to excel are e-health, e-accessibility and robotics. Canada's expertise in photonics was also cited as an area where partnerships with Europe could be developed. This comes as no surprise since Canada has the only all-optical national high-speed network in the world. Cooperation between the two regions has been helped along over the years by initiatives such as 'Information society technologies — Europe Canada' (IST-EC). This joint Canada-Europe project in its second phase aims to connect the European and Canadian research communities in key IST areas. Activities include partnering services and partnering events.

'The best way to keep the cooperation going is with face-to-face meetings like those happening at the IST event,' said Ms Ockwell. 'These are very important because we can go back home and stay in contact, knowing that the relationship is established and will grow.'

> Based on CORDIS News attendance at IST2006 Helsinki. For further information on S & T cooperation with South Africa, Jlease visit: http://www.dst.gov.za http://www.esastap.org.za For further information on S & T cooperation with Canada, please visit: http://www.ist-ec.org http://www.ist-ec.org http://www.infoexport.gc.ca/science/eu_home-en.htm http://codis.europa.eu/canada For further information on IST2006 Helsinki, please visit: http://cc.europa.eu/information_society/istevent RCN: 26708

HIGHLIGHTS ••••••••

IST2006 Helsinki showcases state-of-the-art technology

Spread over 9 000 m², some 150 of Europe's most innovative and advanced technology projects had the opportunity to show off their wares during the IST2006 event in Helsinki, Finland, from 21 to 23 November 2006.

CORDIS News toured a number of the stands to learn more about how ICTs are being put to use to solve some of the challenges that we face in our everyday lives.

One of the most visited displays was that of the 'Communication by gaze interaction' (Cogain) project, where delegates could test some of the latest eye control technology devices and software, like MyTobii, a portable communication device which enables people suffering with severe disabilities to gain access to computers with only a few blinks of an eye.

The device is composed of a computer screen with an integrated camera that can be attached easily to wheel chairs. With it, users simply fix their gaze on the digital keyboard and point out the letters they want with their eyes. Currently most text entry is done using a 'soft keyboard' — also a digital keyboard but one which obliges users to move the cursor along until they find the right letter.

Another device developed by partners in the project is the 'I4Control system', which consists of a tiny camera fixed to a pair of glasses and can be used to control objects like a computer mouse or software keyboard.

While the technology behind each of the devices may vary, each of them is using standard control software which the Cogain consortium partners have developed together. This is unprecedented in eye-tracking systems, where software had to be written for every new device.

As illustrated by Mick Donegan of the ACE Centre, one of the partners in the project, standardising the software opens

'Rather than humans attending to machines, we develop digital services that attend to humans.'

the way for more customised applications. He showed a video of a young girl, Helen, who suffers from a very rare disability, using writing activities that were adapted to her level of disability. Helen cannot use traditional aids like switches or special keyboards because every time she



tries to move her body jerks, Mr Donegan explained. 'We developed some specialist activities like a story and a music-playing screen for her. Afterwards we could see that she had become more relaxed about using the eye-control software and is now able to write using it.'

Mr Donegan is responsible in the consortium for getting feedback about the activities from users and relaying their needs back to the researchers. To ensure the widespread take-up of the eye-control technology, the consortium is working with a large study group ranging from people with cerebral palsy to people who are 'locked-in', meaning those that can only move their eyes and only communicate with their gaze. 'About 2 000 people across Europe are using eye-control technology at the moment but we hope that these numbers will go into hundreds of thousands,' he told CORDIS News. To achieve this, the consortium is making some of the applications they developed freely available and is working closely with specialist centres to raise awareness of the benefits of this technology.

Another display drawing the crowds in Helsinki was that of the 'Computers in the human interaction loop' (CHIL) project. 'The aim of our project is to turn the old human-machine paradigm on its head,' explained Margit Rodder of the University of Karlsruhe, Germany, one of the partners in project. 'Rather than humans attending to machines, we develop digital services that attend to humans.' These services include the 'Memory Jog', which prompts people in meetings with background information and memory assistance, and 'Targeted Audio', which uses ultrasound to effectively speak directly to someone in the meeting, unbeknown to the other attendees. This could be a useful tool, Ms Rodder suggested, in cases where someone in the meeting has forgotten another attendee's name.

Also showcased was CHIL's 'Smart Workspace', aimed at enabling colleagues to work together more efficiently. 'There are many devices available to help people work on their own like palm pilots, blackberry devices and laptops, but public collaborative work is still pen and paper,' explained project partner Fabio Pianesi of the Italian centre of research, ITC-IRST.

'Our system, which has normal PC requirements, can be projected overhead onto a regular table or installed on a large computerised touch screen table, around which members of a work group sit,' Mr Pianesi told CORDIS News. 'This allows people in a meeting to consult and work on documents together. And after the meeting, you can go back to your office and receive a summary of the meeting via a webpage which details the topics covered and the time spent on each of the documents.' The system has been fully developed and the consortium is now conducting some lastminute tests with a number of potential customers.

Perhaps the most tried and tested device at the exhibition was the new 'SmartUs' playground environment. Located within the Finnish Pavilion, the playground consists of a large i-grid jump pad and a screen which serves for active learning games both indoors and outdoors. The concept behind the games played is very similar to that of 'What Simon Says': when a letter appears on a specific grid on the screen, players must mimic the computer by jumping to the corresponding grid on the mat. As the game progresses, players are expected to follow the instructions more quickly.

continued on page 7

2006 Marie Curie Excellence Awards announced

The five winners of this year's Marie Curie Excellence Awards were announced at a ceremony in Lausanne, Switzerland, on 16 November 2006. Each picked up prize money of EUR 50 000 for their outstanding work in a variety of scientific fields, including cognitive neuroscience, nanotechnology, physics and atmospheric science.

Established in 2003, the awards recognise results achieved by researchers, in any field of science, who have benefited from one of the European support schemes. Known as the 'Marie Curie actions', these schemes aim to widen researchers' career prospects and promote excellence in European research.

'The Marie Curie [Excellence] Awards are one way in which we acknowledge the excellent research being done in Europe,' said European Science and Research Commissioner Janez Potočnik. 'We want to encourage the potential of all European researchers and highlight the positive effects of moving within or outside the EU for the purposes of research?



Prize winner Dr Michal Lavidor is one of many researchers who have benefited from the mobility opportunities on offer through the Marie Curie fellowships. Thanks to one of these grants, she was able to go from Israel to the United Kingdom to research how interhemispheric stimulation in the brain promotes reading enhancement. Although not a 'born researcher' — having worked for several years in a consulting company — Dr Lavidor decided to go back to university, where she became fascinated by human behaviour and in particular the human faculty of reading — this led to her current research.

The thrill of a challenge drove Dr Chris Ewels, another of this year's winners, to take

up a career in science. Being a researcher is an ideal job for him, he says, since no two days are the same when it comes to exploring the unknown. Dr Ewels' work on computer modelling of doping and defects in graphite and carbon nanotubes has taken him around Europe to the United Kingdom, Italy, Sweden and Germany. He now holds a permanent position at the Centre national de la recherche scientifique (CNRS, the French

national centre for scientific research), which he says is thanks to a 'European training and mobility of researchers' position and a Marie Curie fellowship.

According to Dr Nicolas Cerf from Belgium, mobility has been key in his career. Having worked in France for two years, his research on quantum information and quantum computation took him to sunny California, United States, Without a doubt, both experiences have been the source of numerous and beneficial international collaborations, he says. He believes that Europe is beginning to appreciate more the work of its researchers but it is a long way off from the level of recognition in the United States. Jobs are not hard to come by in Europe but the main problem is finding a permanent position, he says.

Other award-winners include Dr Paola Borri, Italy, for her research into semiconductor nanostructures and their ultra-fast response to laser light, and Frank Keppler, Germany, for his discovery of climaterelevant trace gasses from terrestrial ecosystems.

European funding support for the mobility of researchers is set to increase substantially in the coming years. Under FP7, a total of EUR 4 billion will be allocated to the 'Marie Curie actions'. This represents an increase in the budget of EUR 2.3 billion since FP6.

Based on information from the European Commission. For further information on the 'Marie Curie actions', please visit: http://cordis.europa.eu/mariecurie-actions RCN: 26670



http://cordis.europa.eu

continued from page 6 'IST2006 Helsinki showcases state-of-the-art technology'

Katrina Lahtinen, Content Designer of SmartUs from the Finnish group Lappest, which heads the project, explained the impetus of the playground. 'Our project set out to address several challenges facing children today. The first is to fight obesity and improve the health of children, which has declined because children do not play outside and move about as much.'

'Kids are under too much pressure in school; we wanted to make learning fun because children do not think about learning when they play [...]. We also wanted to help those children that have difficulty learning in the conventional way,' she told CORDIS News. The project partners hope that adults and the elderly will also use the playground to exercise, and as a way to spend time and interact with the family.

In addition to word games, the playground can be used for other learning exercises in mathematics, geography and music. 'Teachers can create content with the help of special tools that can incorporate images, sounds and text into familiar games,' explained Ms Lahtinen.

Although it is only two years since the project started, the partners have already successfully commercialised the product and several sales have been made. Ms Lahtinen said that the playground has

attracted a lot of interest from schools, amusement parks and even shopping centres.

All three projects received funding under the 'Information society technologies' (IST) programme of FP6.

> Based on CORDIS News attendance at IST2006 Helsinki. For further information, please visit: http://www.cogain.org http://chil.server.de http://www.smartus.fi RCN: 26701

See also 'Following in the shadow of Commissioner Reding, page 30

EU enlargement: what impact on research in Bulgaria, Romania and the EU?

When the European Commission approved the accession of Bulgaria and Romania to the EU on 26 September 2006, reactions around Europe were mixed. Commentators honed in on immigration, the Structural funds, judicial reform or the final farewell to the Iron Curtain.

But at a time when research is being talked up as the way to a knowledge economy, and consequently competitiveness and growth, what does Europe's research community, and in particular that of Bulgaria and Romania, make of the enlargement? What will research from these countries bring to the EU? And as Bulgarian and Romanian researchers have been fully involved in EU research programmes for some time, will it actually make any difference?

Worker mobility has been a talking point in many countries, and several have introduced restrictions on the number of Romanians

' 'Romania is not strong enough to have critical mass in all areas. We need to cooperate on common projects.'

and Bulgarians able to take up employment following their accession to the EU on 1 January 2007. With science and research problems being international in nature, this could have a detrimental impact on the sharing of knowledge between the EU's newest and more established members.

All of the researchers and representatives to whom CORDIS News spoke believe that enlargement will bring changes for science and technology (S & T) in Bulgaria and Romania, in spite of mobility restrictions.

Dr Vesselina Ranguelova, a Bulgarian researcher working at the European Commission's Joint Research Centre (JRC), believes that her country's accession to the EU will raise awareness in Bulgaria of EU research programmes. 'Although we are part of the European research area already, not every researcher knows about the possibilities of the EU,' she told CORDIS News. She also expects accession to make moving around in Europe and making contact with potential research partners easier.

Dr Dan Dascalu, Director of Romania's National Institute for R & D in Microtechnologies (IMT Bucharest), expects that Romania's membership to the EU will lead to more of a correlation between the research done in his country and that done EU-wide. 'Romania is not strong enough to have critical mass in all areas. We need to cooperate on common projects. I hope accession will bring a higher degree of consistency in national programmes,' he says.

Of course both countries have already come a long way by themselves. In 2004, Romania launched a national programme to prepare its research community for European integration and FP7. Some 2 052 projects were funded in four categories: complex R & D projects; human resources; participation in European and international projects; and



University of Bucharest, Romania

research infrastructure. Mircea Sbarna, the Counsellor for Research and Education at the Mission of Romania to the EU, draws attention to some immediate pay-backs, witnessed in 2005: 11 PhD researchers from abroad decided to work at a Romanian research institute; 18 technological platforms were set up; and 36 % of the available budget went towards new equipment.

Romania's budget for R & I increased by 80 % from 2005 to 2006, to 0.4 % of GDP. For 2007 it is expected to rise by a further 52.5 %.

Bulgaria adopted a national plan aimed at increasing research investment to 3 % of GDP. This is an ambition shared by the 25 EU Member States. In September 2006 the plan was updated to include actions on university capacity-building and preparing for FP7. This will include cofinancing for teams that win FP7 grants.

Bulgaria also commissioned an international review of its National Science Fund. The ensuing report made some important recommendations, but also had praise for initiatives such as the 'Promotion of young scientists' scheme and the funding, in 2005, of Bulgarian proposals submitted for funding as an EU Science Support Action, which were rejected at the last hurdle by EU evaluators.

Those that spoke to CORDIS News also pointed to other positive trends such as a move towards the establishment of private sector research bases in Bulgaria and Romania, and the increase of publications and citations are also on the increase.

For some at least, the changes have made Bulgaria and Romania more welcoming for researchers. Dr Ranguelova has seen Bulgarians return home after time spent abroad. Brain drain was at its height between 1992 and 1995, but has now practically stopped, she believes. She puts this down to improved conditions and the 'dynamic environment for good ideas', which offers better opportunities than those available in other countries.

Romania too has seen some of its researchers return home, in particular the 11 PhDs mentioned above. Dr Roumen Nikolov, Vice-Dean at the Faculty of Mathematics and Informatics at Sofia University, is not quite so confident however. He would like to see a move away from brain drain and towards 'brain circulation', but predicts that enlargement will lead to a new wave of Bulgarians packing their bags for shiny new laboratories and enticing opportunities elsewhere. 'Europe has a shortage of 1 mil-

continued on page 9

continued from page 8 'EU enlargement: what impact on research in Bulgaria, Romania and the EU?'

lion researchers and we are becoming the main suppliers,' he told CORDIS News. He is though keen to emphasise that he is not against his country's accession to the EU, and has in fact been campaigning for it for many years.

Bulgaria and Romania have been associated to the EU's research framework

.....

'Bulgaria adopted a national plan aimed at increasing research investment to 3 % of GDP. This is an ambition shared by the 25 EU Member States.'

programmes since FP4, which ran from 1994 to 1998. Over that time, participation has increased, and during FP6 they had the same rights and obligations as EU Member States for the first time, allowing their researchers to become project leaders and create consortia made up exclusively of partners from the then candidate countries.

This made research the first area in which enlargement became a reality. A glance at the latest statistics shows 332 Bulgarian participants in 268 FP6 signed contracts, with a total EU contribution to Bulgarian participants of around EUR 31.2 million. Some 407 Romanian teams participated in 317 signed FP6 contracts, with a total EU contribution to Romanian participants of around EUR 39.8 million.

Both countries have seen the most success in the 'Information society technologies' (IST) programme, followed by 'Sustainable development, global change and ecosystems'. But participation is still significantly lower than that of EU Member States. Thus far, teams from Germany have been involved in 3 027 projects, teams from Poland in 1 005 projects, teams from Portugal in 597 projects, and teams from Hungary in 655 projects.

Mr Sbarna for one is not satisfied with Romania's record, but points out that 'when you invest, the results don't come immediately. We now have a good strategy and economic growth.' He also drew attention to the number of Romanians abroad who may be participating in EU projects.

The researchers interviewed by CORDIS News had various views as to what their country needs in order to inflate these figures and improve the quality of their research in general. Dr Nikolov believes that subsidies, particularly for infrastructure, are the answer. 'The free market is good, but we need additional measures, for example funding for infrastructure, inside the Member States,' he told CORDIS News. 'It's a matter of policy, not money [...]. This would make sure that our universities attract researchers as other universities do.'

For Dr Ranguelova, networking and prioritisation are important. Bulgaria is a small country and cannot be a big player. Through a network the country is however able to share its expertise and learn from partners.

Networks are also key for Dr Dascalu, and he believes that EU accession will grant greater access to these networks.

Dumitru-Dorin Prunariu is the Director of the recently opened Romanian Office for Science and Technology (ROST) in Brussels. He is already well known among Romania's scientific community as the country's first cosmonaut. For him, what Romania needs in this in spite of mobility restrictions and the fact that both countries already participate in the framework programmes. But what about the rest of the EU? Will researchers from the current Member States also reap rewards from enlargement?

Dr Ranguelova is very positive. Bulgarian and Romanian researchers will bring diversity as well as new ways of working and thinking, she believes. 'Bulgarian researchers have been exposed to a very dynamic environment. They have had to adjust rapidly. Things are going much more slowly in the EU — there is more inertia. Bulgarian researchers had to think a lot about how to survive and have therefore become innovative,' she explains.

In addition to skills and expertise, researchers from Romania and Bulgaria may also inject a new wave of optimism when they become EU nationals on 1 January 2007. Attitudes are overwhelmingly positive and a certain anticipation awaits the date for accession.



Sofia, Bulgaria

order to advance scientific performance and results is to be included in the international community. For this reason, Romania sends some of its students abroad to do their Masters' or PhD. 'We have good experts, but not necessarily science management experts,' he told CORDIS News. 'If we don't learn to be an efficient part of the international community, it's difficult.'

Inside Bulgaria and Romania it seems that scientists are unanimous in expecting positive returns from EU membership. And The future looks bright, since 2007 will witness not only EU accession for Bulgaria and Romania but a new Framework Programme, FP7, surely a defining moment for European research.

> Based on CORDIS News interviews. For further information, please visit: http://cordis.europa.eu/fetch?CALLER=MSS_NEWS_ BG_HOME&ACTION=R http://cordis.europa.eu/fetch?CALLER=MSS_NEWS_ RO_HOME&ACTION=R RCI: 26611

Norway: small country, big results

Norway looked ahead to FP7 and took stock of a very successful FP6 when it became one of the first countries to launch FP7 nationally on 13 and 14 November 2006.

Norway may not be an EU Member State but its success rate in FP6 is the envy of many of those that are. A Norwegian partner has been involved in 1 of 10 projects, which is not bad for a country of only 4.6 million people. Proposals involving Norway also have a 28 % success rate — significantly higher than the EU average of 18 %.

These results are no doubt the product of what Norway is doing at home. Norway spends 1.75 % of its GDP on R & D, compared to the EU figure of 1.93 % (and 3 % is the goal, as in the EU).

As highlighted by Robert Jan Smits, Director for 'ERA: research programmes and capacity' at the European Commission's Research DG, if Norway were a member of the EU, it would enjoy a high position in the league tables. The country would come in fifth in terms of its number of scientific publications, third for its number of researchers as a percentage of the workforce, and second for its public expenditure on education.

As suggested by these figures, Norway takes R & D very seriously. This became all the more evident with the publication of a White Paper on research in 2004. In an interview with CORDIS News, Norway's Minister for Education and Research, Øystein Djupedal, described the paper as very important, explaining 'it's actually the floor of what we are now building'.



Øystein Djupedal, Norway's Minister for Education and Research

'Research has always been an important issue in Norwegian politics, but in this White Paper the aims are very high and ambitious, just like in the Lisbon strategy — the 3 % goal is there and through cooperation in the [EU] framework programmes we see a lot of the same thematic areas. So we think, from the Norway side, this is one of the most important White Papers published,' said Mr Djupedal.

In addition to the funding target, the paper highlights internationalisation, basic R & I as the priorities for the period 2005–10.

The minister said that the paper was very well received by the Norwegian research community. 'Everybody's referring to it all the time,' he said. He also emphasised how the paper had been adopted unanimously by the Norwegian Parliament.

Norway also has some very successful neighbours as models. 'Of course we look very much to what Sweden and Finland have done. Where they are especially suc-



cessful and where we are not so successful is with business investment in research,' Mr Djupedal told CORDIS News.

Most of Norway's companies would be considered SMEs in the rest of Europe, with a handful of energy companies the exception. The government is actively investigating what can be done from its side to promote more business investment, the minister explained.

The size of its companies is just one of the challenges faced by Norway as a small country. One of the ways in which Norway compensates for its size is cooperating with other countries, particularly through the framework programmes. 'The framework programmes are the most important international cooperation we have. We are a small country, and although we think that we are bright, we have to accept that there are some fairly bright people elsewhere as well! This means that we are very dependent on cooperation.'



The approach appears to have been successful, as the minister pointed out: 'Denmark and Sweden and Finland — in the European context we're not big countries, none of us. But our societies are actually quite prosperous.'

EU cooperation has also broadened Norway's horizons somewhat, opening doors beyond the Nordic region. 'One of the strange things I just learnt is that although we have historically close contact with, for instance, a country like Denmark, through the Sixth Framework Programme we have even more projects with Poland than we have with Denmark [...]. I was really astonished to learn this, but that's a part of how it should be.'

Norway's participation in FP7 is yet to be finalised but should be a matter of formality as Norway has participated in the framework programmes since the latter part of the Third framework programme (FP3). Association to FP7 must however be approved by the EU's Council of Ministers and the Norwegian Parliament. As the importance of the framework programmes is recognised across the political board, the minister is not expecting any problems.

With this enthusiasm for the framework programmes, as well as the attendance of over 1 300 people at Norway's FP7 launch, Norwegian success in FP7 seems fairly certain.

> Based on CORDIS News attendance at Norway's FP7 launch. For further information on research in Norway, please visit: http://cordis.europa.eu/norway http://www.forskningsradet.no/english RCN: 26663

EU introduces new rules on aid to boost R & D & I

The European Commission has announced new rules on aid paid out by Member States to companies for research, development and innovation (R & D & I) projects.

The new guidelines will allow Member States to 'tailor make' their funds to kick start private sector investment in R & D as long as they address a 'defined market failure', have an 'incentive effect' and do not 'excessively distort competition and trade'.

If the measures have been drawn according to these guidelines, the Commission should authorise the aid faster than under previous state aid rules.



As state aid is prohibited unless specifically authorised by the Commission under EU law, widening the scope of state aid to promote R & D & I is an effort to stimulate Europe's economy and meet the target of increasing spending on R & D to 3 % of GDP by 2010. EU Competition Commissioner Neelie Kroes said: 'Thanks to the Commission's new R & D & I Framework, Member States should find it easier to use state aid to boost private sector R & D and innovation projects. The Framework is an important contribution to the Strategy for growth and jobs.'

Ueapme, the European SMEs employers' organisation, welcomed the proposals as they will allow aid to cover the cost of patents, support services and the employment of qualified personnel.

Separately, the Commission also called for a more effective use of tax incentives in favour of R & D to boost trans-European cooperation and job creation.

The Commission's proposals offer a 'template' for national tax incentive schemes, and draw on a variety of best practices already in operation throughout the 25 EU Member States.

These new guidelines should enter into force from the 1 January 2007.

Based on a press release from the European Commission. For further information, please visit: http://ec.europa.eu/comm/competition/state_aid/reform/rdi_en.pdf RCN: 26702

New EU task force to boost science education

The European Commission has created an expert group to look into how best to support science education in Europe's primary and secondary schools.

The new group will formulate policy recommendations designed to improve the way that Europe approaches science teaching and so ensure that future generations are well equipped to live and work in a knowledge-based economy.

There is growing evidence that children and young people across Europe are increasingly losing interest in science and opting not to study it at university. At the same time, a



recent *Eurobarometer* survey found that 80 % of the adult population believes that young people's interest in science is essential for our future prosperity.

'A truly knowledge-based society needs its citizens to be involved,' said European Science and Research Commissioner Janez Potočnik. 'We have to do more to prepare our young people for a future that will require good scientific knowledge and an understanding of technology.' The new group brings together leading scientists with strong backgrounds in science education. Member Doris Jorde of the University of Oslo, Norway, is President of the European Science Education Research Association (ESERA), while Dieter Lenzen of the *Freie Universität Berlin* (Free University Berlin), Germany, used to be Chair of the *Deutsche Gesellschaft für Erziehungswissenschaft* (German society for science education). Other group members include Harriet Wallberg-Henriksson of the Karolinska Institute, Sweden, who was a member of the Swedish Ministry of Education and Science's Expert Panels, and Peter Csermely of the

Semmelweis University in Budapest, Hungary, who won the Descartes Prize for communication in 2005. The group will be chaired by MEP Michel Rocard, former French Prime Minister.

The experts will look into existing initiatives designed to promote good science education in Europe, such as the 'Pollen' and 'Nucleus' projects. The 'Pollen' initiative aims to support science teaching in primary schools. The 'Nucleus' initiative is a cluster of projects which brings together research organisations, museums, science centres and universities across Europe. Achievements of the initiative to date include the establishment of Xplora, a European science education internet portal, the creation of a *Science in schools* journal and the running of a 'Science on stage' festival.

> Based on a press release from the European Commission, IP/06/1631. For further information, please visit: http://www.pollen-europa.net http://www.xplora.org RCN: 26724

See also 'Ireland enrols superheroes to take science to children', page 25



Bringing neglected diseases in from the cold

'It is time to bring neglected diseases in from the cold and to bring real hope to those who live and too often die from them.' This was the rallying call made by British MEP John Bowis to representatives of governments, pharmaceutical companies and non-profit organisations attending the first day of an international conference on neglected infectious diseases (NIDs) in Brussels, Belgium, on 8 November 2006.

Buruli ulcer, dengue, leishmania, river blindness, schistosomiasis, sleeping disease and Chagas are just some of the infectious diseases currently ravaging whole populations across the developing world. These diseases are so called 'neglected' because although they are responsible for an estimated 500 000 deaths and millions of disabilities each year, less than 10 % of the world's biomedical research funds are dedicated to them. Between 1975 and 1999, of the 1 393 new drugs that reached the market, only 13 were approved for tropical diseases. Meanwhile, of the drugs currently available, some are deemed highly toxic, ineffective or difficult to administer.

'This is an imbalance that we cannot live with', said Mr Bowis, spokesman on Health and Consumer Affairs for the Group of the European People's Party and European



Democrats (EPP-ED). The MEP outlined these imbalances in his 2005 parliamentary report thus giving new impetus to a debate on the consequences of these diseases and prompting the European Commission to organise a conference on the issues at stake. Much of the funding and support for infectious diseases in recent years has gone to the three big killer infectious diseases: HIV/AIDS, malaria and tuberculosis (TB). 'The international community is right to focus on preventing and tackling these diseases,' said Mr Bowis. 'But in doing so, it should not forget that at least a billion people — one sixth of the world's population — suffer from one or more neglected tropical diseases. The burden of these diseases, some of which reinforce AIDS and TB, is incalculable.'

Despite a somewhat daunting challenge, some inroads have been made into tackling and raising awareness of the need for more R & D. In 1975, several organisations including the United Nations Children's Fund (Unicef), the World Bank and the World Health Organization (WHO), to name but a few, got together with governments, foundations and companies to set up a 'Special programme for research and training in tropical diseases' (TDR) which to date has brought to the market six drugs to treat some of these diseases. In 2003 the

'Drugs for neglected diseases initiative' (DNDi) was established to develop drugs and other health tools for people suffering from diseases that fall outside the scope of market-driven R & D because they do not constitute a profitable market. It estimates that developing these drugs over the next 10 years will cost around EUR 250 million.

'There has been progress but my belief is that we need a new sense of urgency for a wider range of diseases, if we are to remove the very real burden of disease from the economies and peoples of low income countries and ensure that prerequisite for economic health, which is human health,' argued Mr Bowis.

Looking to the European Commission, Mr Bowis welcomed efforts to give more support to research for preventing, diagnosing and treating NIDs. He singled out the important work undertaken

by the 'International scientific cooperation' (INCO) programme of FP5 and FP6, which together have funded over 50 projects involving public and private partners from developed and developing countries to the tune of EUR 70 million on neglected diseases. Indeed, INCO has been one of the few international research funding programmes providing sustained support to tackling specific diseases as well as health systems and health service issues of disease control. Mr Bowis also welcomed the explicit reference in FP7 to neglected diseases and the programme's emphasis on 'translational research', which he said was 'precisely the kind of research which is needed to translate lots of scientific research that has been done in institutes and universities through R & D pipelines of clinical trials into packaged and distributed medicines.'

In addition to FP7, the MEP said that the Commission could think about broadening the scope of the 'European and developing countries clinical trials partnership'

'Health systems in many developing countries are starved of resources.'

(EDCTP), which is currently working on developing new and improved drugs and vaccines for HIV/AIDS, malaria and TB, to include some of the neglected diseases.

'We need to stress the "D" in "R & D", said Mr Bowis. '[...] policies have tended to focus on how to get the research off the ground but have often failed to support the development.' Further emphasis is required on initiatives which involve both public and private partners. 'We must harness the best of the public sector (in the "R") with the best of the private sector (in the "D") and apply successful models to the most neglected diseases,' he added.

But there is little sense in marketing drugs unless the health systems and infrastructures are in place. 'Health systems in many developing countries are starved of resources,' said Mr Bowis. He underlined the need for the countries themselves to invest more and the international community to complement this with long-term support and technical support, including training of health workers at the local level.

Problems related to access would also need to be addressed, such as international and national pricing policies, tariffs, taxation and the implementation of intellectual property rights (IPR). On pricing, Mr Bowis referred to the suggestion made recently by Pascal Lamy, Director-General of the World Trade Organization (WTO), for developing countries to make use of their right under the Agreement on 'Trade-related aspects of intellectual property rights' (TRIPS) to issue 'compulsory licences' for drugs for killer diseases, since no country had yet done so. 'Just the threat of this could increase pressure on pharmaceutical companies to reduce prices,' surmised Mr Bowis.

continued on page 13

Automotive industry epitomises 21st century challenges, says Verheugen

European Commission Vice-President Günter Verheugen opened the annual European Council for Automotive R & D (EUCAR) conference on 22 November 2006, saying that the automotive industry has 'little choice but to strive for technological leadership'.

In a speech aimed as much at policy-makers as at the automotive sector, Mr Verheugen reminded his audience of the challenges facing the sector, and emphasised the importance of innovation as a means to remain competitive in the face of these challenges.

'The automotive industry is the key industry for Europe,' said Mr Verheugen, pointing out that six EUCAR members were among



the top 20 European investors in R & D, along with two automotive suppliers.

'The new superpowers [emerging economies in Asia] will compete on everything. There are those in Europe who still believe that the old division of labour is still in place. This is a dangerous understanding,' said Mr Verheugen.

But in addition to competition from the Far East with its inexpensive and plentiful human resources, the automotive sector must also deal with the limited availability of fossil fuels and other raw materials,

pressure to make vehicles more environmentally friendly and concerns about safety. 'The automotive industry epitomises the challenges that Europe will face in the 21st century,' said Mr Verheugen.

Mr Verheugen said that climate change is likely to remain a Commission priority for several years to come but told automotive stakeholders that this should not be seen as a threat.

While the industry certainly has its work cut out if it is to remain competitive in a global economy, the onus is not only on the private sector. 'Policy-makers must create a framework to allow you to stay in Europe and invest in Europe,' said Mr Verheugen. The Commissioner also said that innovation can sometimes suffer from political problems. 'People must be prepared to accept change. That's exactly what they don't do. We must not avoid change but manage it,' he said.

Mr Verheugen advocated collaboration in the shape of clusters as a way of bringing together all players who can then learn from one another and increase their chances of gaining access to finance.

Collaboration was a point picked up by Thomas Weber, EUCAR Chairman for 2006 and member of DaimlerChrysler's Board of

'People must be prepared to accept change. [...] We must not avoid change but manage it.'

Management. Speaking after the Commissioner, Mr Weber said: 'We need the oil industry, we need policy makers, we need customers'.

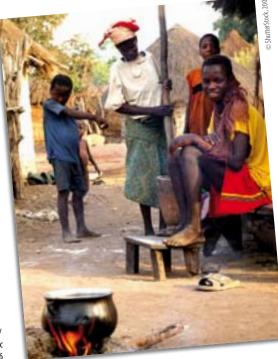
He outlined a number of priority areas for the future, including alternative fuels, hybrid systems, active safety and passive safety. 'We are in the precompetitive phase, we are focused on the right things,' he said.

> Based on CORDIS News attendance at a EUCAR reception. For further information on EUCAR, please visit: http://www.eucar.be RCN: 26703

continued from page 12 'Bringing neglected diseases in from the cold'

Also speaking at the first day of the conference, Octavio Quintana Trias, Director of Health at the European Commission's Research DG, said that FP7 would help to create greater synergies between international work on neglected diseases and the rest of health research, since INCO health activities would be embedded for the first time within the larger health programme. 'This way [neglected diseases] will have greater visibility which is always important when dealing with research which needs to be advocated for and needs greater funding,' said Mr Quintana Trias.

'We are starting a long-term investment in research on neglected infectious diseases and we look forward to working with you [the stakeholders] in this challenging adventure,' he concluded. Based on CORDIS News attendance at a conference on NIDs. For further information on the conference, please visit: http://teamwork.intbase. com/0606_02/index.php For further information on INCO, please visit: http://cordis.europa.eu/inco To read the EP report on neglected diseases, please visit: http://teamwork.intbase.com/0606_02/ download/European_Parliament_Report.doc RCN: 26626



EU project to develop biocatalytic fuel cells

Fuel cells that run off blood. Sounds incredible? Not to researchers in a new EUR 2.8 million EU research project.

The BioMedNano project aims to develop so called 'biocatalytic' fuel cells — cells which use bodily fluids for fuel and enzymes which then convert the chemical energy into electricity. These cells could be used to power a whole range of medical devices including pace makers, insulin pumps, artificial limbs, microsurgery robots or biosensing systems. The fuel cells will be so small in size that they may be implanted under the skin to provide a direct power supply to these devices.

Project partners say that there are significant improvements to be had in using biocatalytic fuel cells instead of the more traditional sources of power supply. Current implantable devices such as cardiac pacemakers rely on batteries for power, however this technology uses highly-reactive lithium, making miniaturisation expensive and difficult.

'Biocatalytic fuel cells represent a realistic opportunity for the provision of implantable power and there is enormous scope for the wider application of biosensors in the area of medical diagnostics, in environmental monitoring and in food quality,' said Dr Donal Leech of the National University of Ireland, coordinator of the BioMedNano project.



'We are delighted to have secured this funding which will allow us to make important strides forward over the next number of years and look forward to leading the way in research in this field,' he added.

Over the three-year period, project partners will aim to screen for novel enzymes and design novel nano-structured scaffolds for

> enzyme immobilisation to provide medical devices with improved sensitivity and power output.

The project is funded as a specific targeted research project (STREP) of FP6, and involves partners from the Czech Republic, Finland, Ireland, Israel, Italy and the United Kingdom.

Based on information from BioMedNano. For further information on BioMedNano, please visit: http://www.nuigalway.ie/biomednano For further information on the FP6 'Nanotechnology and nanosciences, knowledge-based multifunctional materials and new production processes and devices' (NMP) priority, please visit: http://cordis.europa.eu/nmp RCN: 26658

Israeli researcher receives EU grant for development of 'electronic nose'

An Israeli researcher has been awarded a grant of EUR 1.73 million by the EU under its 'Marie Curie excellence awards programme' for the development of an 'electronic nose' that can sniff out cancer.

Dr Hossam Haick of the Israel Institute of Technology received the award as part of the EU's efforts to strengthen and encourage young promising scientists.

Dr Haick is 31 years old and also the recipient of the largest grant ever received from the EU by an Israeli researcher. He will be

'Realisation of the research goal will enable creating an instrument based on nanometre-sized sensors that can diagnose different cancers [...].'

working on artificial olfactory systems or 'electronic noses' aimed at sniffing out and diagnosing cancer at the earliest possible stage before it spreads.

'Realisation of the research goal will enable creating an instrument based on nanometre-sized sensors that can diagnose different cancers and even determine at what stage the disease is,' explains Dr Haick. 'The diagnosis can be carried out at a very early stage even before the tumour has begun to spread. Thus, treatment will be immediate and will destroy the disease at its inception.'

Electronic noses are one example of a growing research area called biomimetics, or biomimicry, which involves humanmade applications patterned on natural phenomena.

As an odour is composed of molecules, each of which has a specific size and shape, each of these molecules has a receptor of a corresponding size and shape in the human nose. When a specific receptor receives a molecule, it sends a signal to the brain and the brain identifies the smell associated with that particular molecule. Electronic noses based on the biological model work in a similar manner, substituting sensors for the receptors and transmitting the signal to a program for processing instead of the brain.



Dr Hossam Haick

Dr Haick intends to develop sensor arrays made of nanomaterials, understanding the fundamental chemical, physical and electrical properties of these nanomaterials as well as the signal mechanism of these sensors.

He will also be developing the smallest versions of these electronic noses the 'e-nose on chip', which is a single computer chip containing both the sensors and the processing components.

In addition to targeting the early diagnosis, detection and screening of a disease, artificial olfactory systems are used in environmental-monitoring, the food industries and security.

> Based on a story from 'Electronic News Digest'. RCN: 26673

'Mappa mundi' of Grid computing now available

A new interactive map showing the 'Enabling Grids for E-sciencE' (EGEE) infrastructure and eight of the other world's largest computing Grids is now available.

The map, developed by researchers from GridPP in the United Kingdom and the European Particle Physics Laboratory (CERN) in Geneva, Switzerland, uses Google Earth to pinpoint Grid sites on six continents, showing more than 300 sites overall. Like the medieval '*mappa mundi*', which showed what was known of the world at the time, this map is one of the first attempts to show the whole scientific Grid world.

Gidon Moont from Imperial College London, United Kingdom, who developed the interface with Google Earth, said: 'It's very exciting that we can, for the first time, see these major Grids together on one map. Interoperation will be a key area for the future of the Grid and the map will show how it grows.'

Grid sites are displayed on Google Earth using a KML file. When this file is opened in Google Earth the locations of the Grid sites are added to the Google Earth map. Clicking on each site gives the name and location of the site, and identifies the Grid to which it belongs. The map queries a database that includes site information from the following Grid projects:

- EGEE (worldwide);
- 'Open science Grid' (OSG, mainly United States);

- 'Nordic data Grid facility' (NDGF, mainly Scandinavia);
- 'National research Grid initiative' (Naregi, Japan);
- TeraGrid (United States);
- 'Pacific Rim application and Grid middleware assembly' (Pragma, Pacific Rim);
- 'Distributed European infrastructure for supercomputing applications' (DEISA, Europe);
- 'National Grid service' (NGS, United Kingdom);
- 'Australian partnership for advanced computing' (APAC, Australia).

The EGEE project is cofunded by the European Commission. It consists of over 20 000 central processing units (CPUs) available to users 24 hours a day, 7 days a week, in addition to about 5 petabytes (5 million gigabytes) of storage. It maintains around 20 000 concurrent jobs. Having such resources available means that it is ideal for any scientific research where the time and resources needed for running the applications are considered impractical when using traditional IT infrastructures.

http://cordis.europa.eu

Originating from two scientific fields — highenergy physics and life sciences — EGEE now integrates applications from many other scientific fields, ranging from geology to computational chemistry.

As Albert Einstein said: 'Computers are incredibly fast, accurate and stupid; humans are incredibly slow, inaccurate and brilliant; together they are powerful beyond imagination.'

Based on a press release from EGEE. For further information, please visit: http://www.eu-egee.org The file showing Grid sites on Google Earth and instructions on how to install it can be downloaded from: http://www.gridpp.ac.uk/demos/gin_monitor.html RCN: 26679

Improving Europe's drinking water

A new European project aims to increase our knowledge of water borne diseases and so help to improve the quality of drinking water in Europe.

The problem of dirty drinking water is often associated with poorer developing countries but the quality of drinking water in many European countries leaves much to be desired.

'We suspect that contaminated water causes more illnesses than generally believed,' said Dr Manfred Höfle of the *Helmholtz-Zentrum für Infektionsforschung* (Helmholtz centre for infection research), Germany, and coordinator of the new 'Healthy water' project which is funded by the EU's FP6. The problem is that there are still many gaps in our knowledge of what microbes are present in European drinking water and their effects on human health.

'We currently only determine one particular bacteria count, and that is *E. coli*,' explained Dr Höfle. 'We know virtually nothing about the frequency of other bacteria, viruses, or so-called protozoa, which are single-cell animals.'

Dr Höfle and his colleagues have already developed an 'aqua-chip' which has already proved effective at detecting bacterial pathogens in water. Now the project partners hope to make the chip sensitive to protozoa and viruses. The researchers will also carry out an epidemiological study to identify factors that could suggest a correlation between infections and unclean drinking water. 'So far we do not have this kind of structured data in Europe,' noted Dr Höfle. 'We think this will give us some indication which pathogens we should pay particular attention to when developing the chip.'

Ultimately, the project partners hope that the knowledge generated by the project will help to improve the quality of drinking water and so reduce the burden of waterborne infections in Europe.

> Based on information from the 'Helmholtz-Zentrum für Infektionsforschung'. For further information, please visit: http://www.helmholtz-hzi.de/en RCN: 26686



EU-funded project looks at fighting HIV and TB with a new nasal vaccine

HIV/AIDS is causing a global health crisis unprecedented in the recent history of mankind with an estimated 2.4 to 3.3 million people dead in 2005 alone and a third of these deaths occurring in sub-Saharan Africa, according to World Health Organization (WHO) figures.

An EU funded project, 'Mucosal vaccines for poverty related diseases' (Muvapred), is running its first series of trials to study a novel nasal vaccine against HIV which will aim to neutralise the virus where it enters the body.

The vaccine uses a small modified part of the outer protective shell of the HIV virus that has been modified to enhance protection against HIV infection. It also uses the 'LTK63' molecule as a 'mucosal adjuvant' to boost the immune response to the HIV components of the vaccine and direct the response to the genital tract, the key infectious entry point for the virus.

By delivering the vaccine via the nose, not only will the use of needles be avoided, but it will also exploit the ability of nasal immunisation through 'mucosal adjuvants' to provoke protective immune responses in the genital tract.

A total of 30 subjects make up the study which will determine the safety and immunogenicity of the vaccine in humans. It will then compare antibody and cellular responses to the HIV components with and without the LTK63 mucosal adjuvant.

In addition, and unique to this study, women will have responses to HIV measured in samples obtained from the cervix and vagina using new techniques.

If successful, the vaccine will go into further and more extensive evaluation in Phase 2 trials and in Phase 1 trials with volunteers in Africa.

Ultimately, this vaccine could offer protection against HIV infection through sexual contact, which is the primary means of transmitting the virus and the global HIV/AIDS pandemic.

> Based on a press release from Muvapred. For further information, please visit: http://www.mucosalimmunity.org/muvapred http://ec.europa.eu/research/health/ poverty-diseases/projects/111_en.htm RCN: 26749

http://cordis.europa.eu

EU-funded project sheds light on HIV in Europe

According to recent figures from the World Health Organisation (WHO), in 2006 there were some 22 000 new HIV infections in Western and Central Europe. In total 740 000 people in the region are living with HIV.

Tracking the progress of those newly infected with HIV in Europe is the EUfunded 'Concerted action on SeroConversion to AIDS and death in Europe' (Cascade) project, which has been running since 1997. The Cascade project partners are monitor-



ing people with well-estimated dates of seroconversion — this is defined as the moment when HIV antibodies can first be detected in the blood and usually occurs within three months of exposure to the virus. By studying people whose seroconversion dates are

known, the partners are able to track the progress of the disease from the very beginning and investigate which factors affect survival.

'We have been able to document, in the absence of therapy, what matters and what doesn't matter in determining survival,' explained Dr Kholoud Porter of the British Medical Research Council's Clinical Trials Unit, which is coordinating the project.

Dr Porter said that without therapy, average survival times decline steadily with age. Someone infected in their early 20s could expect to live for an average of 14 years, while someone infected in their 50s faced an average survival time of just 6 years. These findings have practical implications for treatment, as they can help clinicians decide whether a patient should start taking therapy or not. In total the project is tracking over 17 000 people across Europe. As well as looking at the impact of age on survival, the project partners are also studying gender differences and would like to do more work on differences in survival between different ethnic groups.

The project has also explored the impacts of therapy on survival. With the advent of therapy, people are living longer, often in excess of 20 years. 'We now expect that 10 years after infection, 90 % of people will still be alive,' said Dr Porter.

One interesting finding from the project is the fact that therapy benefits older people more than younger people. Although this appears counterintuitive, the researchers

'We now expect that 10 years after infection, 90 % of people will still be alive.'

believe it could be because older people are better at adhering to their therapy and following medical advice. Therapy also benefits women more than men, probably for similar reasons.

As therapies become more effective, and survival time increases, it is likely that more HIV positive people will die of non-AIDS causes. However, as Dr Porter pointed out, although people are living longer, they do not have a good immune status. She is particularly con-

continued on page 17

Breastfeeding and probiotics may protect children from allergies, finds NoE

The 'Global allergy and asthma European network' ($GA^{2}LEN$) — a 'Network of excellence' (NoE) — has presented evidence that breastfeeding, early diet and probiotics may have an effect on the development of allergies in children.

The GA²LEN project is funded under the FP6 and brings together 26 research centres from around Europe, as well as the European Academy of Allergology and Clinical Immunology (EAACI) and the European Federation of Allergy and Airways Diseases Patients' Associations (EFA).

The number of people suffering from allergies has increased dramatically over the past few decades. The phenomenon is particularly evident in children, with one in three now suffering from some sort of allergy. GA²LEN predicts that by 2015, half of all Europeans will have some sort of allergy.

'It is generally agreed that a combination of heredity and environmental factors is responsible for the development of the allergy and asthma. However, the evolution of these diseases has been far too rapid for genetics to be the sole explanation,' say the GA²LEN partners.

Changes in diet over the past 20 to 40 years are one explanation for the upsurge in allergies. In a paper published in the journal *Clinical and Experimental Allergy Reviews*, 12 European experts from GA²LEN argue that the development of allergies could be influenced by three factors: breastfeeding, early diet and probiotics.

'It appears that exclusive breastfeeding for four months helps protect the child from cow's milk protein allergy until 18 months, reduces the likelihood of dermatitis (skin allergy) until three years and reduces the risk of recurrent wheeze (or asthma) until six years of age. However, the longer-term effects of breast feeding on allergic outcomes are not known and require investigation, say the partners.

Research also suggests that those babies

that cannot be breastfed can have their chances of avoiding allergies increased by drinking hypoallergenic formula and avoiding solid foods for four to six months. This is especially important if one of the parents has a history of allergies.

A second area of importance appears to be the components of the diet. Research suggests that having antioxidants such as vitamin C, vitamin E and selenium in the diet, most of which are found in fruit and vegetables, has a protective effect. More research in this area is still needed however. 'Much of the research conducted to date has not been systematic in its approach and this makes the drawing of hard conclusions very difficult,' state the GA²LEN partners.

Also a priority for future research is probiotics and prebiotics, the NoE has found. These living organisms appear to protect against the development of allergies by producing changes in the bacteria in the gut that stimulate the immune system.



continued from page 16 'EU-funded project sheds light on HIV in Europe'

cerned that there will be an increase in cancers. Furthermore, many people with HIV are coinfected with hepatitis C, making them more prone to liver disease.

However, even as therapies extend the survival times of people with HIV, the project partners are increasingly worried about forms of HIV which are resistant to existing therapies. In particular they are monitoring the extent of transmitted drug resistance across the population and working to understand its consequences on therapy.

An area of particular interest for the project is central and eastern Europe. The project has partners in four countries in the region: Estonia, Poland, Russia and Ukraine. While many Western European countries have been tracking cohorts of people with HIV for many years, in Eastern Europe there is no tradition of establishing and following cohorts.

A major aim of the project is to build research capacity in the region, and to this end the project is training researchers there to carry out tests like the 'Serologic testing algorithm for recent HIV sero-converters' (Starhs). Starhs shows whether someone was infected with HIV recently or a long time ago. Those who are identified as having been recently infected can then be enrolled in a cohort to track the progress of the disease in people in those countries. The project is funded in its current form until 2010 but Dr Porter hopes it will be able to continue beyond then and extend its reach further into Eastern Europe. Meanwhile it will continue to provide an essential overview of the factors influencing the survival of the growing numbers of people in Europe who are living with HIV.

The paper calls for further research in all of these areas in order to identify dietary pat-

terns that may be involved in the development of allergies and asthma, and to build

up an evidence base on whether supplemen-

tation with specific fats or probiotics could

contribute to protection or treatment. 'The studies required will need to be large and

to be well planned, designed and executed.

They are likely to require cross-country col-

Based on information from GA²LEN.

For further information, please visit:

http://www.ga2len.net

RCN: 26685

laboration,' say the partners.

Based on CORDIS News interview with Dr Kholoud Porter. For further information on Cascade, EU-funded research into poverty-related diseases and the HIV/AIDS programme of the WHO, please visit: http://www.ctu.mrc.ac.uk/cascade http://ec.europa.eu/research/health/ poverty-diseases/index_en.html http://www.who.int/hiv/en RCN: 26739



Regional policy must support innovation as well as solidarity, says Hübner

'While regional policy has always been our main instrument for reducing social and economic disparities across the regions of the Union, it is now also recognised as a key pillar of the strategy to promote growth, jobs and competitiveness,' said EU Regional Policy Commissioner Danuta Hübner on a visit to the United Kingdom on 17 November 2006.



Danuta Hübner

'This is our largest

investment programme

ever. It is a tremendous

and competitiveness

of the European Union.'

opportunity to contribute

significantly to the growth

Regional policy still has a role to play in promoting solidarity throughout the EU, 'an essential characteristic of the process

of European integration' according to Ms Hübner. But in the face of globalisation and its inherent challenges, regional policy must now also support competitiveness and innovation, said the Commissioner.

'In order to benefit, we must have the flexibility to adapt to the changing world around us. We must raise our level of competitiveness to be able to seize the opportunities. And given that the benefits are

not always evenly spread across the economy, we must put in place policies which ensure they are,' Ms Hübner told an audience at the University of Leeds.

The Commissioner outlined three important policy responses to globalisation: increased emphasis on research, development and innovation (R & D & I); unlocking the business potential of small companies and entrepreneurs; and investing more in education and training.

She then turned to the contribution that regional policy should make to these issues. The Commission has introduced a new,

more strategic approach, she said. 'This aims to integrate growth strategies at European, national and regional level — to put in place an effective multi-level partnership which adds legitimacy to public policy implementation.'

EU Member States have agreed on strategic guidelines dictating three priorities for future investments: improving the attractiveness of Member States, regions and cities by improving accessibility and the quality and level of services; encouraging innovation, entrepreneurship and growth through, for example, research; and creating more and better jobs by attracting people into employment and entrepreneurial activity, improving workers' adaptability and increasing investment in human capital.

The European Commission has also sought to instigate regional partnerships so as to identify problems and solutions more effectively as well as to involve financial institutions in the design and implementation of EU regional policy. 'The aim is to support Member States in developing financial instruments, such as

> risk and venture capital, or micro-credits. Improving access to such instruments is essential because small enterprises are a key source of innovation and job creation, and too often they are starved of the funds to finance their ideas,' said Ms Hübner. The new generation of regional policy will also place greater emphasis on urban areas.

Cohesion policy will receive over EUR 360 million from the EU budget

between 2007 and 2013, a figure likely to be boosted to EUR 500 million when contributions from the Member States are taken into account. 'This is our largest investment programme ever. It is a tremendous opportunity to contribute significantly to the growth and competitiveness of the European Union,' said the Commissioner.

Based on a speech by Danuta Hübner, SPEECH/06/701. For further information on EU Regional Policy, please visit: http://ec.europa.eu/dgs/regional_policy/index_en.htm RCN: 26678

Money cannot buy effective innovation, says new study

A new study has found that money alone cannot buy effective innovation and guarantee the high return on investment sought by companies.

The annual *Global Innovation 1000* study of the world's largest 1 000 corporate R & D spenders found that less than 10 % of companies are 'high leverage innovators', producing significantly better performance per R & D dollar spent over a sustained period. The Smart Spenders: The Global Innovation 1000 report assessed the influence of R & D spending on corporate performance and discovered insights which suggest that the relationship between the two is not a simple one. For only 94 high-leverage innovators, success relied on their ability to squeeze benefits from R & D spending, their economies of scale and their capabilities as 'masters of the innovation value chain' in ideation, project selection, development and commercialisation of their final product.

Furthermore, the study found no statistical relationship exists between the number or quality of patents and a company's overall

continued on page 19

Stakeholders release declaration on innovation

Innovation professionals have released a list of priority actions needed to ensure the EU's competitiveness. The Valencia Declaration on Innovation sets out 20 points for action based on feedback collected from innovation specialists, researchers, CEOs, managers and others attending the Europe Innova conference in Valencia, Spain, from 26 to 28 November 2006.

Many of the points echo those raised by the European Commission in its own 10-point innovation strategy which was issued back in September 2006. Like the Commission, the innovation stakeholders place a high priority on education, improving the links between research and industry, reforming state aid rules, stimulating research through public procurement and strengthening regional innovation.

Other points which coincide with Commission priorities include the call for the establishment of a European Institute of Technology (EIT), greater protection of intellectual property and removing obstacles to researchers' and engineers' mobility, both between sectors and countries. On the subject of SMEs, the declaration notes a need for an 'innovation-friendly environment that enables them to become more actively involved in research and technological development'. The declaration calls on the European Commission and Member States to accelerate the structural reforms needed to achieve this.

The issue of innovation in the services sector is also raised. 'Innovation in services will support the competitiveness of the EU economy,' says the paper. 'The Commission and Member States should ensure that their policy tools and instruments support all forms of innovation, including in services.'

Elsewhere the declaration calls on the Commission to establish a 'pan-European innovation platform for start-ups in knowledge intense services, linking universities, incubators and the financing community to support young innovative SMEs.'

On the issue of jobs, the paper notes that 'Europe needs to better use the substantial employment opportunities that the areas of eco-innovation and sustainable development are offering.'

The authors of the paper invite the European Commission to take note of their concerns and pass them on to the Competitiveness Council. Europe's Heads of Government gave their backing to many of these proposals at their informal summit in Lahti, Finland, in October 2006 when they discussed the Commission's 10-point innovation strategy.

Based on information from the Valencia Regional Office in Brussels. For further information, please visit: http://www.europe-innova.org RCN: 26731



continued from page 18 'Money cannot buy effective innovation, says new study'

financial performance. Current important innovations in television technology are still based on patents from the first half of the 20th century.

The report states: 'Conventional wisdom often seems to view R & D as a predictable black box that automatically translates today's innovation investments into tomorrow's profits, even if nobody quite understands how it works [...]. Innovation often does lead to higher performance but the process isn't automatic.'

'Many companies' R & D efforts are unfocused. Money is wasted "reinventing wheels" that others have already rolled out. Good ideas get stuck in developmental bottlenecks. And promising innovations never get to market because of flawed understanding of customers' needs and poor marketing and investment planning,' reads the report.

It goes on to say that 'there is no silver bullet. If these high achievers have one thing in common, it seems to be a focus on building multifunctional, company-wide capabilities that can provide them with sustainable competitive advantage. They design their innovation investment for the long run and create superior growth and profitability over time.' The European companies among the top 20 global R & D spenders were DaimlerChrysler, Siemens, GlaxoSmithKline, Volkswagen, Sanofi-Aventis, Nokai and Roche Holdings.

However, the 10 European companies that made it onto the list of 94 global 'high leverage innovators' were Adidas, Cadbury Schweppes, Christian Dior, Meda, Phonak, Recordati, Smith & Nephew, Synthes, Trelleborg and the Volvo Group.

Based on the 'Smart spenders: the Global Innovation 1000' report by management consulting firm Booz Allen Hamilton. To download the report, please visit: http://www.boozallen.com/media/file/Global_Innovation_1000_2006.pdf RCN: 26664

Lack of access to knowledge main obstacle to innovation, finds Portuguese survey

Some 40 % of businesses in Portugal are innovators, according to findings from the Fourth Community Innovation Survey (CIS 4). This figure could be increased, businesses say, if more information on technology, markets and potential partners were readily available to them.

Published by the Portuguese Observatory for Science and Higher Education (*Observatório da Ciência e do Ensino Superior*, OCES), under the guidance of Eurostat, the survey provides an overview of business innovation activities for the period 2002 to 2004. Over this period, it finds that 40 % of businesses in Portugal were conducting some kind of innovation activities. This is similar to the results from the *Third Community Innovation Survey* (CIS3) report, which showed that between 1998 and 2000, 46 % of Portuguese businesses were involved in some kind of innovation activity. At the time, Portugal was just above the EU average.

In the latest survey, these businesses spent a total of EUR 2.8 billion on their innovation activities, just 2 % of their overall turn-over. In CIS3, the EU average was 3 %. A total of 70 % of that amount was allocated to the acquisition of machinery, equipment and software, while 24 % went to R & D activities.

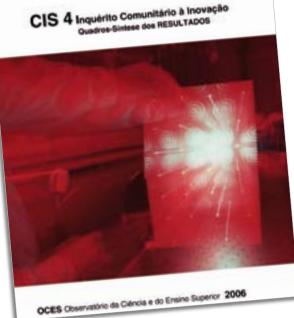
According to the survey, the highest proportion of innovation occurred in the R & D services — 100 % of companies are active in this domain. Next came post and telecommunications (78 %), computer and related activities (75 %) and technical testing and

analysis (74 %). In terms of their geographical spread, the majority, some 44 to 46 % of innovation companies, was found to be active in the centre of Portugal and around the capital, Lisbon.

Only 1 out of 10 companies benefited from some kind of public support for innovation. These tended

to be mainly companies with 250 or more employees (40 %) rather than smaller-sized establishments. Slight preference was also given to companies in the industrial sector as opposed to the services sector.

Asked to indicate where companies got information to help with their innovation ideas, 29 % reported having found other companies working in the same sector 'highly important'. A total of 18 % of companies found institutional sources, such as the government or public research institutes as well as universities, were very helpful. Only 8 % considered resources within the companies themselves as important sources of information.



As for the factors standing in the way of innovation, most companies said that there was a definite lack of information on technology, on the markets available to them as well as a lack of qualified personnel. Companies also underlined the difficulty in finding partners with which to cooperate.

Details of all the country reports in CIS 4 are being published since the end of November 2006.

Based on information published by the OCES. For further information on the Portuguese country report, please visit: http://www.oces.mctes.pt/?id_categoria=29&id_item=161704 For further information on CIS, please visit: http://cordis.europa.eu/innovation-smes/src/cis.htm http://epp.eurostat.ec.europa.eu RCN: 26636

http://cordis.europa.eu

European innovation policy must take small businesses on board

European innovation policies should focus on the essential contribution made by small businesses in the 'mid-tech' and 'low-tech' sectors, says Ueapme, the European SMEs employers' organisation.

Ueapme believes that SMEs are the most innovative companies in Europe because their methods are characterised by ongoing permanent innovation processes rather than the linear, research-driven inventions carried out by the larger enterprises.

The organisation is therefore calling upon the Finnish Presidency of the Council of the EU to push forward a broader approach to innovation that would include policies promoting the supply of qualified labour, an improved regulatory environment and better access to finance.

'The high-tech sector is indeed an important driver for innovation but even in the United States its contribution to the GDP does not exceed 5 %,' said Paul Reckinger, Ueapme President. 'The European Commission has recognised in its latest communications the need to expand the definition of innovation to focus on SMEs and take account of non-technical innovation in all economic sectors. This new approach must be now implemented in all policy areas to become of use for small businesses,' he continued.

In its meeting with Tanja Halonen, President of the Republic of Finland, the Board of Ueapme stressed the importance of promoting technology transfers via technology centres and incubators. It also suggested that measures to sustain innovation support service providers, clusters and networks should be foreseen in the upcoming Community framework for State aid for research, development and innovation (R & D & I).

continued on page 21

Innovation and IPR at centre of transatlantic talks

Intellectual property rights (IPR) and innovation topped the agenda at the second informal EU-United States Economic Ministerial Meeting which took place on 9 November 2006.

Commission Vice-President Günter Verheugen and Finnish Minister for Trade and Industry Mauri Pekkarinen met United States Commerce Secretary Carlos M. Gutierrez and Energy Secretary Samuel W. Bodman to review joint progress in the most significant areas of the transatlantic economy.

The meeting followed up on commitments made at the EU-United States summit in June 2005 and confirmed at the June 2006 summit in Vienna, Austria. There both parties agreed on, among other initiatives, a joint strategy for the enforcement of IPR, focusing on issues such as piracy and counterfeiting.

Vice-President Verheugen said that Europe and the United States had a lot to gain from strengthening economic ties. 'The aim of strengthening growth and competitiveness, creating jobs and boosting productivity through innovation, lies at the heart of both the European economic agenda and of the Transatlantic Economic Initiative,' he said. Already the transatlantic couple boasts the deepest and largest bilateral trade and investment relationship in the world, encompassing some EUR 600 billion of trade in goods and services each year and large flows of investment and providing employment to as many as 14 million people on both sides of the Atlantic.

However, this relationship could be jeopardised by cumbersome regulatory barriers and inadequate policies, EU and United States officials warned. Only result-oriented policies in the areas of innovation — which includes protecting and enforcing IPR — and regulation would reduce bureaucracy and regulatory barriers to trade and investment, they argued.

Vice-President Verheugen, Minister Pekkarinen and Secretaries Gutierrez and Bodman

agreed to specifically tackle the regulations that slow down economic growth, and to work more closely with emerging economies China and India to fight counterfeit and piracy and enforce IPR.

Both parties also agreed to collaborate on a limited number of R & I projects in the automobile sector, nanotechnologies and health-related industries.

The next EU-United States summit is due to take place in the first half of 2007.

Based on information from the European Commission. RCN: 26645

continued from page 20 'European innovation policy must take small businesses on board'

On access to finance, the organisation believes risk-sharing models such as mutual and public guarantee schemes should be promoted both at EU and Member State level to enable start-ups, business transfers and innovative companies to fully realise their potential.

Ueapme called for a new drive for a European Community patent to be initiated as soon as possible. Such a system would protect innovation with a system of reduced fees for SMEs and a proper patent litigation insurance structure.

http://cordis.europa.eu

The Board also presented Ms Halonen with the SME views and needs on issues such as taxation, flexibility in labour markets, environmental policy, better regulation and better governance. 'European small businesses would definitely benefit from a new, refined innovation policy both at EU and Member State level. The success Finland had in modernising its economy and in understanding the importance of innovation is an example to be followed by all EU Member States,' concluded Mr Reckinger.

> Based on a press release from Ueapme. For further information, please visit: http://www.ueapme.com/EN/index.shtml RCN: 26599



Before contacting the Commission, all tenderers are strongly advised to consult the original call text in the Official Journal of the European Union.

Corrigendum to prior information notice: impact assessment study of FP6 review activities

The European Commission's Research DG has published a corrigendum to its prior information notice of an impact assessment study of FP6 ethical review activities.

The scheduled date for the start of the award procedure has changed from 1 October 2006 to **31 March 2007**.

To see the full details of the corrigendum, please visit:

http://ted.europa.eu/udl?uri=TED:NOTICE: 236606-2006:TEXT:EN:HTML *OJ S 221-236606, 21.11.2006*

RCN: 26692

ECDC publishes call for scientific experts

The European Centre for Disease Prevention and Control (ECDC) has published a call for expressions of interest from scientific experts.

The ECDC is searching for support for the following tasks (non-exhaustive list) in a number of fields:

- helping to prepare scientific opinions;
- compiling reports on the basis of information provided by the Centre and its network partners;
- supporting the functioning of ECDC scientific panels;
- collecting scientific evidence to support the Centre in its activities.

The Centre is searching for experts in the fields of:

- infectious diseases;
- clinical microbiology;
- public health;
- infectious disease epidemiology;
- statistics and/modelling of infectious diseases;
- public health crisis including bioterrorism;
- epidemiology training;
- comparative epidemiology;
- influenza vaccines;
- antiviral drugs;
- design and development of medical terminologies and related web services;
- standardisation/modelling/evaluation of health data;
- social scientist;
- HIV/STIs;
- information programme evaluation.

The deadline for requesting tender documents is **1 August 2008**. The deadline for submitting tender docu-

ments is **8 August 2008**.

For further information, please contact: European Centre for Disease Prevention and Control, Procurement S-17183 Stockholm Tel. (46-8) 58 60 10 00 Fax (46-8) 58 60 10 01 E-mail: procurement@ecdc.eu.int To see the full details of the call, please visit: http://ted.europa.eu/udl?uri=TED:NOTICE: 170948-2006:TEXT:EN:HTML OJ S 159-170948, 23.8.2006

JRC's IPTS publishes call for expressions of interest

The Institute for Prospective Technological Studies (IPTS) of the European Commission's Joint Research Centre (JRC) has published a call for expressions of interest for various studies.

The IPTS intends to compile a list of companies interested in the execution of studies in the following fields:

- 1.1. life sciences: agriculture and agrofoods;
- 1.2. life sciences: biotechnology;
- 2.1. foresight on information society technologies and key applications in Europe;
- 2.2. information and communication technologies (ICTs): prospective on R & D, cybersecurity and identity;
- energy technologies and greenhouse mitigation policies, including modelling;
- environment: clean technologies, sustainable production and consumption;
- 5. transport: technology for transport sustainability, including modelling;
- support to research policy (including human resources and universities): analysis and prospective;
- 7. economics of technical change;
- economic dimensions of prospective technological studies;
- 9. cost benefit analysis;
- social dimension of sustainable development, including structural unemployment;
- 11. economics of industrial R & I.

The deadline for submitting documents is **3 March 2009**.

For further information, please contact: European Commission Directorate-General Joint Research Centre IPTS Ed. Expo, c/ Inca Garcilaso E-41092 Seville E-mail: JRC-tendersIPTS@cec.eu.int To see the full details of the call, please visit: http://ted.europa.eu/udl?uri=TED:NOTICE: 111827-2006:TEXT:EN:HTML OJ S 105-111827, 3.6.2006

RCN: 25763

While every effort is made to ensure that the information in the CORDIS *focus* Newsletter is accurate, readers who wish to follow up on any of the opportunities cited in the Newsletter should confirm the validity of information with the contacts and/or references cited in the entries.

RCN: 26218

AROUND EUROPE

Janez Potočnik outlines EU research opportunities for Malta

In an article for the Sunday Times of Malta, the Commissioner for Science and Research, Janez Potočnik, has urged the country to seize the opportunities for cooperation offered by the EU and EU research projects.

Using the mighty pen he spoke directly to the government, private enterprises and scientists of Malta on the concrete benefits that their country could enjoy by being part of the EU. He referred to the cooperation opportunities of the European technology platforms (ETPs) and the new FP7.

The Commissioner began his article by calling on the government to honour its commitment to raise R & D spending from 0.29 to 0.75 % of GDP by 2010, so as to create the favourable conditions that then encourage greater private sector investment.

Identifying the factors important for companies when making R & D investment decisions was another area where Malta could gain from working with its EU partners, according to the Commissioner. Other Member States' knowledge and experience could then be adapted to fit Malta.

Regarding innovation in products and services, Mr Potočnik recognised the paramount importance of private sector investment and so encouraged Maltese companies to view R & D investments as investments in their companies' future.

He cited the ETPs as an example of a real driver of innovation where a whole sector is brought together to establish a vision of where it would like to go. They also allow companies, universities, research institutes, financial organisations and consumers to identify the research needed to get there. The success of the European mobile communications industry was held up as a case in point.

As for FP7, the Commissioner highlighted possibilities for the involvement of companies in research projects and how the programme would particularly look into increasing the participation of SMEs in cooperative projects. He said: 'I see great potential for Maltese companies to take advantage of both these aspects of the programme — because for a small country like Malta, European cooperation is vital. It can give Maltese scientists and companies access to facilities and infrastructure that are just not viable at national level.'

Mobility was held up as another advantage of EU membership. Almost EUR 5 billion will be available under the 'Mobility' section of the programme



to support researchers wishing to carry out their research in another Member State or for university researchers interested in spending time working in industry.

The Commissioner concluded by saying that 'by engaging with European partners, Maltese companies, your university and your people will benefit directly. I very much hope that Malta will seize the opportunities offered by the new European programme and get involved.'

> Based on an article by Janez Potočnik in the 'Sunday Times' of Malta. For further information on research in Malta, please visit: http://cordis.europa.eu/malta RCN: 26618



http://cordis.europa.eu

Finnish Presidency launches European network of living labs

The Finnish Presidency of the Council of the EU launched the European network of living labs as a step towards the creation of a new European innovation system (EIS) on 20 November 2006 in Espoo, Finland.

The European network of living labs is a collaboration of public private partnerships (PPPs) where companies, public authorities and people link up to share information, research and test new products in the fields of ICT and mobile services.

The aim of the initiative is to stimulate innovation by moving research out of the laboratories and into the real life contexts of cities and regions where citizens and users will be encouraged to cooperate with researchers, developers and designers to contribute to the whole innovation process. Finnish Prime Minister Matti Vanhanen said at the launch event: 'One of the goals of the network is to attract companies from around the world to take part in European R & I efforts.'

'New concrete measures are needed to [...] make Europe more competitive and innovative in a human-centric way, a way that focuses on people's real needs.'

So far, about 20 European cities have signed up to the initiative. 'Across Europe, cities and regions gain comparative advantages by swiftly advancing their infrastructure



for transportation and telecommunications. Cities that become nodes in crossborder networks attract business firms and investors, tourists, and other visitors, says the living labs website.

Based on a press release from the Finnish Presidency of the Council of the EU. For further information, please visit: http://www.cdt.ltu.se/projectweb/4421cddc626cb/Intro_2.html http://www.tietoyhteiskuntaohjelma.fi/etusivu/en_GB/mainpage RCN: 26684

Poles launch FP7 in style

Representatives of the Polish Government and the European Commission encouraged the Polish R & D community to participate fully in FP7 at the country's FP7 launch conference in Warsaw, Poland, on 16 November 2006.



'Polish science has to take advantage of the chances and potential offered by participation in FP7,' said Polish Minister of Science and Higher Research Professor Michal Sewerynski, speaking during the opening session of the event. 'The participation of Poland in FP7 will be favourable to Poland and the EU at large.'

He said he hoped FP7 would bring about enhanced cooperation between industry and scientists, increased mobility of

Poland has very much stepped up its efforts and it's very encouraging to hear there is progress in funding.

researchers, simpler bureaucracy and good projects, particularly in social sciences and humanities field.

Polish participation in the framework programmes has been increasing steadily over the years and the Polish Government is keen to see this trend continue into FP7.

'We have ambitious plans with regard to the Seventh Framework Programme,' added Professor Krzysztof Jan Kurzydlowski, Undersecretary of State at Poland's Ministry of Science and Education.

The Ministry is setting up a number of initiatives to encourage greater participation in FP7. In particular Professor Kurzydlowski wants to see more Polish research groups coordinating European projects, and to this end financial support will be available for Polish groups preparing proposals for projects they will coordinate.

'This is something new,' he told CORDIS News. 'So far we've been awarding those who either successfully or unsuccessfully participated in proposals disregarding whether they were supposed to be coordinators or participants. Now it's going to be more substantial support but for more ambitious projects with Polish coordination.'

The event was also attended by the Director-General of the Commission's Research DG, José Manuel Silva Rodríguez. 'If there is one thing European leaders can agree about it is the need to invest more in education and research,' he told participants, adding that the Member States also had to do their bit to increase Europe's spending on R & D. 'Efforts have to be taken at European, national and regional level,' he commented. 'As the largest country in the region, Poland is expected to lead the way in national and regional cooperation.'

'Poland is a traditional land who very strongly appreciates science, the production of knowledge,' said Christian Patermann, Director for Biotechnology, Agriculture and Food at the Research DG of the European Commission, during a press conference. 'Poland has very much stepped up its efforts and it's very encouraging to hear there is progress in funding.'

Mr Patermann went on to praise the good organisation of the event, saying it was 'one of the best we have registered up to now.' Over 1 300 people attended the event, including over 300 from outside Poland, prompting Mr Patermann to describe it as 'a true European event'.

Based on CORDIS News attendance at the Polish FP7 launch event. For further information on the launch event, please visit: http://www.kpk.gov.pl/inauguracja7pr/english/index.html For general information on R & D in Poland, please visit: http://cordis.europa.eu/poland RCN: 26669



http://cordis.europa.eu

Germany launches nano action plan

'We are going to make sure in Germany, that scientifically excellent results in nanotechnology are turned faster and more efficiently into the products of tomorrow,' said German Minister for Education and Research, Annette Schavan, as she launched the 'Nano-initiative action plan 2010' on 6 November 2006.

The action plan is intended to provide a single framework for action that goes beyond individual government departments and which brings together goals and plans for nanotechnology. The initial focus will be on future fields, the creation of better framework conditions, responsible use of the technology and a comprehensive dialogue with the public.

'This is one of the most promising technology fields with a huge market potential,' said Ms Schavan. According to the Ministry of Education and Research, Germany leads in nanotechnology in Europe. This leadership can be measured in terms of R & D expenditure and the number of companies and research institutes engaged with nanotechnology.

In 2005, Germany invested around EUR 310 million in nano R & D. For 2006 this figure is expected to reach EUR 330 million. Some 600 companies are already involved in the development and use of nanotechnology products, employing around 50 000 people. The ministry predicts that many more jobs are yet to be created, particularly in start-ups and SMEs. A boom in market potential is also predicted — over EUR 1 billion by 2015, according to the German ministry.

Based on information from the German Government. To read the action plan (in German only), please visit: http://www.bmbf.de/pub/nano_initiative_aktionsplan_2010.pdf RCN: 26607

Ireland enrols superheroes to take science to children

The Resistors!, a new animated series for young people which incorporates elements of the science curriculum, was recently launched on national television in Ireland by a public private partnership (PPP).

In action-packed 30-minute episodes, four young superheroes use their scientific knowledge to defeat evil 'hackerdets', who have taken over their city, Cybernia. Each of the character's skills — Luc (light), Sonia (sound) Amber (electromagnetism) and Dig (ICT) — correspond to areas covered in the Irish primary science curriculum.

The aim of the new series is to make science more exciting for primary school children in Ireland. It is also hoped that the depiction of strong female characters will encourage young girls to consider science as a subject option.

Speaking at the launch, Minister for Education and Science Mary Hanafin spoke of new and exciting changes that were afoot in the science curriculum at primary and post primary level in Ireland. 'Changes have been made, not only to what is taught, but also to how it is taught. The launch of *The Resistors!*, a new television series here today, is a further exciting and innovative way of learning about science. I would urge the children to tune in and watch. Students are continuously increasing their learning skills and testing their predictions in the real world,' she said.

The Resistors! is broadcast at peak times on a national TV station and is available for free on the internet, along with interactive games and experiments. The programme has also been converted into formats which are compatible with PlayStation 2, Gameboy and third generation mobile phones, the aim being to get as much 'schoolyard' takeup and exposure as possible. The animated show forms part of an educational outreach programme developed by the Centre for Telecommunications Value Chain Research (CTVR), a new EUR 69 million national telecommunications research centre funded by the Science Foundation Ireland (SFI), the Industrial Development Agency (IDA Ireland) and Bell Labs. CTVR intends to spend in excess of EUR 500 000 over the next five years on its long-term educational outreach programme.

'The initiative is a response to the Irish Government's plans to develop a knowledge economy by 2010. This will rely upon increasing numbers of science and engineering graduates. The necessary increases at third and fourth level [graduate and postgraduate] will only occur with a steady feed-through of science and maths students from the preceding school years, said Donal O'Mahony, Professor in Computer Science at Trinity College, Dublin and CTVR Director.

'Future PhDs of 2015 are taking the Irish Junior Certificate exam this year. If we can encourage one extra student in every Junior Cert class in Ireland to take science and maths to third level we can assure the viability of the Irish high-tech sector and the knowledge economy in the future?

> Based on information from CTVR. For further information, please visit: http://www.theresistors.com http://www.ctvr.ie RCN: 26687

See also 'New EU task force to boost science education', page 11





Slovene Prime Minister promises annual increase in R & D investment

Slovenia's Prime Minister Janez Janša emphasised the importance of encouraging creativity and rewarding it as he presented an award for lifetime achievement to Jože Toporišič, Professor of Slovene literary language and theory of style, on 28 November 2006.

Slovenia is committed to increasing funds for R & D, regarding this as the only way to improve research facilities at universities, increase the number of early stage researchers and cofinance new high-tech companies, said Mr Janša. In 2003, Slovenia invested 1.54 % of its GDP in R & D, according to the European Commission's *Key Figures 2005*. Mr Janša promised on 28 November to increase this figure by 0.1 % annually. Mr Janša also emphasised the importance of a public debate on the ethical issues encountered by researchers and what is permissible in science.

The Prime Minister presented the Zois Award for lifetime achievements to Professor Toporišič, now 80, who published numerous papers and books on the Slovene language while a professor at Ljubljana University.

> Based on information from the Slovene Government. RCN: 26736

EVENTS

'Today is the future' exhibition cancelled

The European Commission has cancelled the 'Today is the future' exhibition, whose opening was due to take place on 7 March 2007 in Brussels, Belgium.

The Commission says that the exhibition, which was expected to showcase some of the remarkable achievements of EUfunded projects, will not go ahead due to unforeseen and exceptional locational circumstances.

In an announcement published online, the Commission says that it hopes to be able to announce soon a reconfigured event to celebrate European research.

For further information, please visit: http://ec.europa.eu/research/fp7/events RCN: 26468

In the coming weeks

Potočnik and Schavan to open Germany's FP7 launch event

EU Science and Research Commissioner Janez Potočnik and German Minister for **Education and Research Annette Schavan** will open a national kick-off event for FP7 in Bonn, Germany, on 15 January 2007.

The two-day event, entitled 'The Seventh EU Research Framework Programme — Europe on its way to the top', is expected to attract some 2 000 participants from Germany and abroad.

International speakers will include Professor Fotis Kafatos, chair of the ERC's Scientific Council; Portuguese Minister for Science, Technology and Higher Education José Manuel Gago, and chair of a recent expert group on innovation, Esko Aho. Interpretation will be provided on the first day of the conference, while workshops on the second day will be held mostly in German.

For further information, please visit: http://www.bmbf.de/en/rp7-auftakt.php RCN: 26660

The events at which CORDIS will be represented are marked with the CORDIS logo. We look forward to welcoming you at our stand. If you would like to contact us in the meantime, please do not hesitate to get in touch with our Help Desk: CORDIS Help Desk



B.P. 2373 L-1023 Luxembourg Tel. (352) 266 48 01 Fax (352) 26 64 93 80 E-mail: cordis-helpdesk@publications.europa.eu

Chitosan in medical sciences

A workshop on the applications of chitosan in medical sciences will take place in Venice, Italy, on 25 and 26 January 2007. Food additives, digestive dysfunction treatment, drug delivery and tissue repair will be the main themes of the event.

Chitosan is produced from chitin, which is the structural element in the exoskeleton of crustaceans.

The workshop will involve keynote lectures, parallel sessions and poster sessions.

For further information, please visit: http://alisf1.univpm.it/venice2006

RCN: 26625

Brokerage event: GreenVillageTechs 2007

A technology-brokerage event on bioconstructions, renewable energies and environment protection will take place on 26 January 2007 in Bolzano, Italy.

The 'GreenVillageTechs' event will enable SMEs as well as research centres and universities to give visibility to their activities, technologies and know-how.

Potential participants are asked to register their profiles online, enabling the organisers to compile and publish an online catalogue prior to the event.

The brokerage event will take place within 'Klimahouse', an international fair on energy efficiency and sustainable building. 'GreenVillageTechs' is organised by the Innovation Relay Centre (IRC) IRENE.

For further information and to register, please visit: http://gvt.ircnet.lu

RCN: 26624

European ICT conference 🔗

A conference on ICT will take place in Istanbul, Turkey, on 29 and 30 January 2007.

The conference will mainly cover the topics addressed in the first call for proposals for ICT projects under FP7, and is also intended as an opportunity for ICT SMEs to meet and exchange ideas. In addition to SMEs, large Information society technologies (IST) companies, research groups and European technology platforms (ETPs) are expected to attend.

Presentations will be given by representatives from the European Commission, CORDIS, Eureka, the IPR helpdesk and others.

For further information, please visit: http://www.ictconference-istanbul.org RCN: 26737

In the coming months

Conference on research for sustainable development in Europe

The Bundesministerium für Bildung und Forschung (German Federal Ministry of Education and Research, BMBF) is organising a conference on research for sustainable development in Europe entitled 'Sustainable neighbourhood — from Lisbon to Leipzig through research' (L2L), which will take place from 8 to 10 May 2007 in Leipzig, Germany.

The aim of the conference is to position sustainability research as an engine for European competitiveness within the Lisbon agenda. It will be a cooperative event between policy and scientific communities, which seeks to provide a forum to debate current research in this field, the interaction between policy, economic and research communities as well as future research priorities.

The Chancellor of the Federal Republic of Germany, Angela Merkel, is invited as patron, and the event will be hosted by Annette Schavan, the Federal Minister for Education and Research. The European Commission will be represented by Janez Potočnik, Commissioner for Science and Research.

The conference is expected to attract approximately 500 international participants, including scientists and researchers, funding institutions, political decision-makers, representatives of industry, as well as the press and media.

For further information, please visit: http://www.fona.de/de/3_akteure/forum _2007/pdf/L2L_Call.pdf

RCN: 26602

Information and knowledge management conference

The Fraunhofer institute in conjunction with the CIB and CSTB have organised a conference entitled 'Information and knowledge management: helping the practitioner in planning and building' to be held in Stuttgart, Germany, from 25 to 27 October 2007.

The conference intends to link researchers and management with practitioners in planning and building. Putting online information sources into the workflow of planning and building projects has not been embraced in the same way as in other industrial sectors.

The tools and technologies of the near future will be explored. The organisers welcome speakers' contributions from all perspectives and backgrounds in this field. Suggested topics include:

- placing information in facilities' design, manufacture, construction and use;
- creating knowledge within construction organisations;
- developing learning organisations in a project environment;
- linking documentation services to practitioners (creating a demand for documentation services);
- information enhancing, processing, mining, retrieval and display in design and construction;
- document classification, indexing, clustering and managing;
- knowledge-based intelligent information and engineering systems;
- knowledge acquisition, organisation and representation;
- web-based knowledge management for cooperative design and construction;
- communities of practice;
- knowledge in converting, sharing and connecting;
- knowledge bases, ontologies and organisational memories.

For further information on the event and calls, please visit:

http://cib-w102.iconda.org/conference 2007stuttgart

RCN: 26023

The events listed in this section are based on event announcements and were selected from the CORDIS events calendar, which is updated on a daily basis. For further information on forthcoming events, please visit: http://cordis.europa.eu/news

OTHER NEWS

ITER parties sign agreement

Representatives from the seven parties to the 'International thermonuclear experimental reactor' (ITER) project have signed the agreement establishing the international organisation that will implement the project.

The signing ceremony was hosted by French President Jacques Chirac at the Elysée Palace in Paris and attended by European Commission President José Manuel Barroso and European Science and Research Commissioner Janez Potočnik as well as ministers from the other ITER signatories (China, India, Japan, the Republic of Korea, Russia and the United States).

President Chirac described the event as 'a new step on an adventure exceptional in every way' and paid tribute to the researchers, engineers and technicians who conceived, passionately defended and developed ITER.

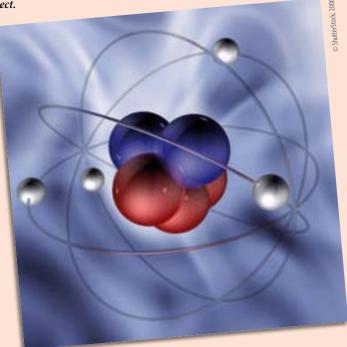
'It is our duty to undertake the research that will prepare energy solutions for our descendents,' he told the assembled dignitaries. 'The major scientific project that is ITER is one of the most innovative programmes to steer this tremendous change. It is the hand held out to future generations, in the name of solidarity and responsibility.'

President Barroso said that ITER would help us take on one of the most urgent challenges facing humanity: to invent clean and sustainable sources of energy for tomorrow.

'[ITER's] official creation today also demonstrates the strength of a united Europe,' he added. 'That is why I can assure you that Europe is fully determined to take on its responsibilities in this project.'

The ITER agreement signed in Paris sets out the necessary provisions for the ITER Organisation to become operational, such as its purposes and functions, its members, legal personality, its council, Director-General and staff. Once the agreement comes into force, probably during 2007, it will have an initial duration of 35 years. After the signing ceremony, the first meeting of the interim ITER Council was held under the chairmanship of Janez Potočnik.

'With the accomplishment of today's meeting, the ITER organisation is able to embark on its mission, as a worldwide international cooperation, to help create a new source of energy for humankind,' said ITER Director-General nominee Kaname Ikeda.



In June 2005 the ITER parties agreed to locate the project at Cadarache in southern France. It is expected to become operational in 2016 and construction costs are estimated at EUR 5 billion over 10 years.

When completed, ITER will produce energy by nuclear fusion, whereby two lighter atoms fuse together to make a larger atom, releasing large amounts of energy in the process. Fusion is the energy source that powers the stars.

> Based on information from press sources. For further information, please visit: http://www.iter.org For an overview of fusion R & D in Europe, please visit: http://ec.europa.eu/comm/research/fusion-for-energy.html RCN: 26693

http://cordis.europa.eu

Bringing ICT benefits to the market

Better disseminating the results of ICT research was the subject of a CORDIS workshop that took place at IST2006 in Helsinki, Finland, on 23 November 2006.

The workshop, which brought together project coordinators, business people and policy makers, explored the complex nature of communicating ICT research, highlighting in particular the difficulties encountered by journalists writing about the matter, and those of project consortia when trying to select the right media channel to spread the word about their work. It also suggested a number of possible media solutions that could be used in this communication process.

Looking at the problem from the perspective of the media, panellist Bernd Hartmann of the *Medien- und Filmgesellschaft* (MFG) Baden-Württemberg, a centre of excellence for information technology and media in the south-west of Germany, presented some of the key findings of a recent survey of some 350 journalists and public relations officers in Germany. One of the main problems identified by those interviewed was the high-level of jargon and acronyms employed in press releases and other media material sent to them. 'ICT is flooded by terms which makes it very hard for a normal guy to understand,' noted Mr Hartmann.

Journalists also said that they were generally wary about information they received on new products, seeing it sometimes as mere publicity for the businesses which were involved in the development process.

continued on page 29

Asked what helps them to better report on ICT, journalists underlined the importance of personal relationships: 'They want to talk to the scientists themselves in order to form their own opinion,' said Mr Hartmann, who added that journalists also like talking to third party scientific experts.

Panellist Mario Martinoli, Director of 'YourIS.com', the website of the IST-TV project, agreed, adding: 'General media do not want to be fed press releases, it is better to provide resources from which journalists can build their own report.' He noted that the focus of any press tools should be on what the product is and not who is developing it. However, according to one member of the audience from a British-based university, the exact opposite is also true. He found from his own experience that a press release was more likely to get picked up by the media if the sender was a university, not an SME. This was because the SME was perceived as advertising a product, while the university was showing how their research could be practically applied, he said. The participant also noted that a news item sent out in the United Kingdom has a greater uptake when it describes the research within a British context.

Meanwhile, panellist David Kennedy of the 'European technology platform' (ETP) for networked and electronic media (NEM) spoke of the unreasonable pressure placed on those participating in ICT research projects in FP6 to disseminate their results. 'I am not sure this is always one hundred percent right, since these projects are started in pre-competitive stages,' he said. By the time the project ends, the consortia may only have a 'rough diamond', meaning a product that requires further development. So 'we [consortia] are not always in a hurry to share these results yet: we want to continue the development and have the product out first,' he said.



Mr Kennedy believes that there is a contradiction between the FP6 project criteria, which obliges consortia to communicate their work, and in the evaluation process, which he says, contains no metric to assess the effectiveness of this strategy. While recognising the need for some kind of dissemination of results, for the purpose of accountability, Mr Kennedy suggested that different communication criteria should be set depending on the type of research undertaken. 'For a project which is trying to obtain consensus of opinion within a European framework, there should be a lot of discussions and dissemination of ideas. But if it's a project trying to achieve a solution in a technical area [...] then we are probably not going to be quite so willing to put the results in such a public domain,' he said.

As much as the workshop highlighted the problems encountered in disseminating and communicating ICT results, participants also heard of some successful experiences. Panellist Uli Bockholt of the 'Markerless

real-time tracking for augmented reality image synthesis' (Matris) 'Information society technologies' (IST) project explained how his project consortium designed its communication strategy at a very early stage, defining exactly what it would try to patent and publish and what R & D should be kept under wraps.

> The consortium also worked closely with students from European business schools, who were asked

to read the project proposal and make business plans about the potential market and application for their products. 'This helped our developers figure out possibilities for further development,' explained Mr Bockholt. It also helped the consortium translate the scientific point of view into a common point of view.

Another success story is the 'YourIS.com' project, which produces short videos on EU funded IST projects. 'The angle of the videos we make are very social,' explained Mr Martinoli. 'The focus is not so much on what the researchers do but how people can benefit from the research in their everyday lives.' The project has broadcast a total of 300 films across 29 European countries. Having studied some 9 000 IST projects, Mr Martinoli believes that some are more telegenic than others. 'Intrinsic technologies like that in Grids are very hard to communicate,' he said.

The human angle has also been the focus of *IST Results*, according to its Editor-in-Chief Philip Hunt. Funded by the European Commission, the portal offers a whole range of media services, including feature articles on specific projects or IST market application areas. It also features stories on new prototypes, emerging results and research that is setting future standards. The portal is regarded as a media success, welcoming more than 150 000 visitors per month. Key to its popularity is its journalistic approach and avoidance of jargon, believes Mr Hunt.

Based on CORDIS News attendance at IST2006 Helsinki. For further information, please visit: http://cordis.europa.eu/guidance/past-events_en.html http://www.youris.com http://istresults.cordis.europa.eu http://www.ist-matris.org http://www.nem-initiative.org http://www.mfg.de/innovation RCN: 26723



Following in the shadow of Commissioner Reding

As Viviane Reding, European Commissioner for Information Society and Media, made her way through the crowds of delegates at the official opening of the IST2006 conference and exhibition in Helsinki on 21 November 2006, a 16-year old Finnish girl by the name of Mikaela quietly followed close behind.

She is one of several young girls from around Europe participating in an initiative started by Ms Reding, dubbed 'shadow girls'. It involves matching women CEOs in IT companies or high-level national government policymakers with young girls, the aim being to instil in them an interest in ICT. The hope is that the interest will turn into a desire to become a researcher or a business

leader. The girls get to follow their mentors over the course of one or several days to find out more about what it is like to work in the sector. 'We have noticed that if we want to boost ICT business, it will be not enough for young men alone to become CEOs and researchers,' Ms Reding told journalists at a

press event.

Earlier this year, the European Commission published *She Figures 2006*, which revealed that although the number of female university graduates is increasing, women's participation in research is generally low across the EU, representing just 18 % in the private sector and 35 % in the public sector. This is a worrying trend given that Europe needs an extra half a million researchers to meet the EU's Lisbon goal of becoming the world's most competitive knowledge-based economy, and women are not filling these posts quickly enough.

Speaking to Mikaela, CORDIS News asked her what she had gained from a day of 'shadowing' the Commissioner. 'I have learnt a lot today about IT as a career,' said Mikaela. She explained that she had toured many interesting exhibits which showed just how technology can be used to help people in their everyday lives. 'Before coming here, I had no idea of what I would like to do as a career but now I am considering IT,' she added.

In order for Mikaela's positive message to reach a larger audience, the Commission plans to make a documentary film to record all of the shadow girls' experiences, which will then be sent to schools all around Europe. Mikaela and her fellow shadows will also take part in a special event in Brussels, Belgium, to highlight the issue, which is expected to coincide with the International Women's Day on 8 March 2007.

> Based on CORDIS News attendance at IST2006 Helsinki. RCN: 26695

See also 'IST2006 Helsinki showcases state-of-the-art technology', page 6

http://cordis.europa.eu

EMBL launches new resource for bioscience researchers

The European Molecular Biology Laboratory (EMBL) has launched a free online resource called 'CiteXplore' which links scientific literature to biological databases.

Viviane Reding and Mikaela Engelvuori

There has long been a need in the biological sciences for a tool which integrates articles from scientific journals with databases containing biological information such as DNA and protein sequences, functions and structures of molecules and microarray data, say the developers of 'CiteXplore'.

'When you are reading an abstract describing a specific gene or protein, typically you want more information on it, for example its sequence or its function as well as easy access to the full paper,' explained Peter Stoehr, who coordinates 'CiteXplore'.

'CiteXplore' was developed by the EMBL's European Bioinformatics Institute (EBI). It brings together abstracts from a range of literature databases, including the European Patent Office (EPO), the Medline database of the United States National Library of Medicine (NLM) and the Chinese Academy of Sciences (CAS). It then links these abstracts to the full text articles.

A powerful text-mining tool identifies biological terms in the text and links them directly to the relevant entry in the EBI's extensive biological databases. These include the EMBL Nucleotide sequence database which covers DNA and RNA sequences; the Universal Protein Ressource (UniProt), which contains information on protein structure and function; and the ArrayExpress public repository for microarray data, which contains information on how genes are expressed.

'CiteXplore' plans to extend the range of literature resources it covers to include domains such as plant science, agricultural and food sciences and to integrate it with the United Kingdom's PubMedCentral project, which was launched recently.

The EBI is Europe's largest disseminator of biological information and the European Strategy Forum on Research Infrastructures (ESFRI) recently highlighted it in its roadmap.

> Based on information from the EMBL. For further information on 'CiteXplore', please visit: http://www.ebi.ac.uk/citexplore RCN: 26727



New initiative to help networks implement Lisbon agenda

The European Commission has published a new communication aimed at bringing more innovation into regional and urban networks. The new 'Regions for economic change' initiative will have a budget of EUR 375 million. The Commission describes the programme as 'a proactive policy tool offered to Member States, regions and cities to help them implement the renewed Lisbon agenda through actions aimed at economic modernisation'.

RCN: 26630

EU launches research programme to better protect armed forces

EU defence ministers launched a new joint research programme which will look into technologies aimed at protecting EU troops against threats such as snipers, booby traps and improvised bombs. The three-year Joint Investment Programme (JIP), coordinated by the European Defence Agency (EDA, http://www.eda.europa.eu), is worth EUR 54.2 million and involves 19 European countries. The programme is due to start on 1 January 2007.

RCN: 26648

More R & D investment needed to boost ICT industry's competitiveness, says report

According to the report Fostering the competitiveness of Europe's ICT industry, published by the European Commission's Task Force on ICT competitiveness and uptake (http://ec.europa.eu/enterprise/ict/ taskforce.htm), the ICT sector relies on R & D more than any other industrial sector. The very nature of the industry requires short innovation cycles which respond to new market demands. Launched in June 2006, the task force is just one of several Commission actions looking into ways to create a more favourable EU business environment under the 'Growth and jobs' initiative.

RCN: 26725

Projects and programmes

European scientists join forces to predict tsunamis

At a recent Euromargins meeting (http:// www.esf.org/euromargins) in Italy, European ocean margin experts came together to discuss the art of predicting tsunamis which can be triggered by earthquakes, underwater landslides, continental landslides or rock falls.

RCN: 26613

Support for participation in FP7: new NCPs on CORDIS

Potential participants in FP7 who are looking for support to prepare their involvement can turn to a broad network of national contact points (NCPs) established and financed by national governments (http://cordis.europa.eu/fp7/get-support _en.html). The NCP network provides personalised support in the participants' own languages in all EU Member States and associated countries.

RCN: 26638

Study: abatement technologies tackle global warming

Enforcing current worldwide air guality protocols may not be enough to reduce the environmental damage caused by elevated nitrogen emissions and increased ozone concentrations - only the implementation of abatement technologies could counteract air pollution and global warming. These are the main conclusions of a study conducted by scientists from the Joint Research Centre of the European Commission (JRC, http://www.jrc. ec.europa.eu) and 'Atmospheric composition change — the European network of excellence' (Accent, http://www.accentnetwork.org), an EU-funded network of researchers.

RCN: 26666

Other news

Scientists warn of marine ecosystem collapse

'Every species counts' is the key message from an international report on marine biodiversity. Threats to some species are seriously threatening oceans' ability to produce seafood, resist diseases, filter pollutants and recover from stresses such as over-fishing and climate change, scientists concluded at the end of a four-year study published in the journal *Science*.

ALSO ONLINE

RCN: 26600

Report warns of brain drain as academics claim dissatisfaction with institutions

A new report reveals the extent to which Scottish universities could be facing a brain drain of professors, lecturers and researchers who say they are planning to work elsewhere in the United Kingdom or abroad. The official study of over 1 500 university staff found that only a quarter of academic staff in Scotland say that they want to stay in the country for their next job.

RCN: 26605

New report provides insight into R & D and internationalisation

The United Kingdom attracts the most foreign research investment in Europe; but foreign affiliates play a much greater role than domestic firms in R & D in smaller EU Member States. These are some of the main findings of a recently published report by Eurostat, the EU's statistical office (http://epp.eurostat.ec.europa.eu).

RCN: 26677

The articles selected for the CORDIS *focus* Newsletter were published online during the previous month. They can be accessed directly on the website by keying in the record control number (RCN) in the 'Search articles' facility or by visiting the online edition (in English only) at: http://cordis.europa.eu/news/focus For a complete catalogue of all CORDIS News articles, please visit: http://cordis.europa.eu/news

European Commission speeches (SPEECH) and press releases (IP) quoted in the references can be accessed on: http://europa.eu/rapid

CORDIS gateway to FP7

In anticipation of the final approval of the Seventh Framework Programme (FP7) by the European Council, CORDIS, the Community Research and Development Information Service, has launched a new FP7 service. The new web service provides the latest state of play as the EU's new research and development (R & D) programme moves into its implementation phase. It will then develop into a fully-fledged support service for all potential participants and interested parties.

The service, which replaces the current 'Towards FP7' pages, provides detailed information on the specific programmes and themes, participation rules and official documents related to FP7. It also contains all the latest developments, announcements and events relevant to FP7.

Adopted work programmes and calls for project proposals will be published on this service as soon as they are available.

The new pages allow users to learn about FP7 in general and, in particular, its specific programmes and their themes, as well as the activities related to Euratom and the Joint Research Centre (JRC). There is also a set of fact sheets in 21 languages, providing general information about the new Framework Programme.

In addition to background information, the new service also includes an FP7 Newsroom, where the most important latest developments relevant to FP7 are highlighted and explained.

For potential participants, there is a guidance section explaining the rules of participation in FP7, including eligibility criteria, explanations of the most important procedures, and a summary of the different types of participation that are available.



The new FP7 service also provides access to sources of support for participants, ranging from the newly-appointed national contact points (NCPs) in each of the EU Member States and associated countries, to a network of liaison officers.

A specific search mechanism for relevant documents in the FP7 library completes the new service, which will continue to develop as the central gateway for all FP7-related information on CORDIS; with a partner search facility to help build FP7 project teams planned for the near future.

Publications.europa.eu

Based on information from CORDIS News. For further information, please visit: http://cordis.europa.eu/fp7 RCN: 26807

| CORDIS | Subscription form |
|--|---|
| | Surname |
| Title First Name | Postcode Country |
| Address | □ Spanish □ German □ English □ French □ Italian □ Polish |
| Language and quantity required: | subscription, please supply your 'subscription registration number of a |
| To change or cancel an existing and tick as appropriate: \Box Ch | this form to: CORDIS <i>focus</i> , OPOCE, B.P. 2201, L-1022 Luxembourg or subscribe online at: focus/subscribe_en.html |
| To subscribe, fill in and return http://cordis.europa.eu/news/ | this form to: CORDIS focus, OF 000, focus/subscribe_en.html |
| J | Online services offered by the Publications Office: bookshop.europa.eu: EU publications cordis.europa.eu: Research and development europa.eu: FU law |

ted.europa.eu: Public procurement

EN