We would like to offer our deepest thoughts to all the victims, families and friends of the terrorist attacks that took place in Brussels.

While this happened so close to us, we want to remember all the victims of terrorist attacks worldwide.
44th SEFI Annual Conference
Engineering Education on Top of the World:
Industry University Cooperation

12-15 September 2016, Tampere, Finland
Organised by the Tampere University of Technology

Subthemes include but are not limited to:

• University-Business cooperation
• Engineering Skills
• Sustainability and Engineering Education
• Quality Assurance and Accreditation
• Continuing Engineering Education and Lifelong Learning
• Open and Online Engineering Education
• Ethics in Engineering Education
• Curriculum Development
• Attractiveness of Engineering Education
• Physics and Engineering Education
• Engineering Education Research
• Gender and Diversity
• “I feel brilliant”

Deadlines

• Registration Open!
• 24 April 2016: Notification of acceptance
• 15 May 2016: Submission of full papers
• 10 June 2016: Notification of final acceptance
• 30 June 2016: End of early bird registration

SUBMISSION and the instructions for authors are available on www.sefi2016.com
Contact: sefi2016@tut.fi

Keynotes Speakers

Dr. Mervyn Jones  Dr. Gary Downey  Dr. Aldert Kamp  Mrs. Marianne Vikkula

More on keynotes speakers and programme on www.sefi2016.com
FROM SEFI AND ITS MEMBERS

CALLS FOR CANDIDATES

The General Assembly to be held in Tampere on September 14, 2016 will elect a Vice-president who shall assist the President in his task (see art. 19 of the statutes: The Vice-President elected in an even year shall succeed after one year the President at the termination of the latter’s mandate (Vice-President, President Elect). Members eager to submit their candidature shall send a CV and Motivation letter to the SEFI HQ before the 25 April 2016 to be reviewed by the board of directors on its meeting to be held on the 23 May 2016 in Munich.

CANDIDATES FOR ELECTIONS TO THE BOARD OF DIRECTORS
The General Assembly to be held in Tampere on September 14, 2016 will elect 7 Members of the Board of Directors (hereafter: Directors) with a mandate of 3 years. (see art. 14 of the Statutes and section IV of the By-laws). Directors are requested to attend 3 meetings per year. Members eager to submit their candidature shall send a CV and Motivation letter to the SEFI HQ before the 25 April 2016 to be reviewed by the board of directors on its meeting to be held on the 23 May 2016 in Munich.

SEFI FELLOWSHIPS
The SEFI Fellowship Award recognises meritorious service to engineering education in Europe. Award recipients may use the expression “Fellow of SEFI” (F.SEFI) as a postscript to their name. The nominees are SEFI individual members who have worked in the field or in the promotion of engineering education for at least the previous five years. We invite SEFI members to propose potential awardees to the SEFI HQ.

Please send all candidatures to francoise.come@sefi.be before April 25th 2016.

8TH EUROPEAN CONVENTION OF ENGINEERING DEANS— ECED
2016
Schools of Engineering at the Forefront
Meeting Challenges of the Engineering Profession
14-15 April 2016, University College London
London, UK

The convention is composed of three interlinked sessions, which follow a general theme relevant to deans of engineering. Being a convention for deans (who carry the operational and strategic responsibility for Schools of Engineering) the convention has a strong focus on how to execute this leadership. The overall purpose of the convention is to help deans of engineering to find inspiration. One important key to this is to facilitate networking between participants during the convention. This is the convention policy for both CESAER and SEFI. We have assembled an exciting programme of keynote speakers across three sessions. However, the key aim of the meeting is to engage leading members of the international engineering community in a discussion on the challenges and future direction of engineering education and research within Europe. The ambition for the convention is to draw up an agenda of items and issues that Engineering Schools will have to deal with in the near future.

Programme overview

Engineering Education: Meeting the Engineering Profession’s Needs
- Professor Sarah Spurgeon, Head of the School of Engineering and Digital Arts, University of Kent
- Dr Jon-Paul Sherlock, AstraZeneca, Director of Product Development,
- Rachel Schroeder, AIRBUS
- Professor Dr.-Ing. Gerhard Müller, Senior Vice President Academic and Student Affairs, Technische Universität München
Engineering Research and Innovation: Meeting the needs of Sustainable Development
- Martin Donnelly, Permanent Secretary to the Department of Business, Innovation and Skills, UK
- Professor Rao Bhamidimarri, Vice-President (Development), London South Bank University
- Per Warfvinge, University of Technology

Engineering Schools Adapting to Change: How much, how fast - and in what way?
- Professor Calie Pistorius, Vice-Chancellor of the University of Hull
- Professor Simon Marginson, Professor of International Higher Education, UCL Institute of Education
- Dr Ruth Graham, International Engineering Education Consultation
- Professor Maria Knutson Wedel, Vice president for undergraduate and master's education, Chalmers University of Technology

A gala dinner will be held on the evening of the 14th April on HMS Belfast, which is moored on the River Thames overlooking Tower Bridge and the Tower of London.

Final programme and registration available on engineering.ucl.ac.uk/eced  centreforenged@ucl.ac.uk

We thank our SEFI corporate partners Mathworks and Dassault Systèmes for their support to this event.

MATLAB EXPO

MathWorks is happy to invite you to the MATLAB EXPO, a series of one-day events held worldwide each year. Learn about latest product capabilities in MATLAB® and Simulink®, hear from users about their innovative applications, network with industry peers, and see demos from MathWorks and partners.

Engineers, scientists, academics, and technical managers will attend MATLAB EXPOS all over Europe to:

- Learn from MathWorks experts about new and improved capabilities in MATLAB® and Simulink®
- Hear how leading-edge companies use MATLAB and Simulink to advance their processes
- See innovative demonstrations and solutions from MathWorks and partner organisations
- Network with peers from across many different industries and application fields
- Take knowledge back to your company and university and apply it immediately to your day-to-day work

To find the MATLAB Expo closer to you and to register for the conference www.matlabexpo.com

SEFI DEBATE 2016

On March 3rd was held the second SEFI Debate in the premises of the European Parliament, hosted by MEP Nikos Androulakis, from the Group of the Progressive Alliance of Socialists and Democrats. The participants were welcome by an addresses of Mr. Dimitrios Papadimoulis, Vice President of the European Parliament, conveyed by Prof. A. Moropoulou and of Nikos Androulakis conveyed by Nikolaos Papazoglou.

The event was open by SEFI Vice-President Antonia Moropoulou, who gave an extensive introduction on matters at hand and on the current parties opinion on the matter of skills in the labour market in Europe and beyond. SEFI’s Position was then presented by SEFI President Martin Vigild, offering an overview of both the accomplished work and the collective work still at end to deepen and enrich SEFI’s view on Engineering Skills.

The keynote was delivered via video by Mrs. Claudia Costin, World Bank Group, Senior Director of the Education Global Practice, followed by a panel of industry representatives composed by Mr. Fokion Tasoulas, Titan Cement Co, Group Engineering & Technology, Executive Director, Mr. Emmanuel Forest, President of European Construction Technology
Platform, Vice President of Bouygues Group and Mr. Xavier Fouger, Dassault Systemes, Global Academia Senior Director Programs.

After an exchange of views the discussion was opened with the audience who gladly contributed to the exchange of ideas.

We would like to take this occasion to thank all the participants, speakers and animators of this debate that proved to be yet again a success for SEFI.

A full report is being prepared by our rapporteur Prof. Pieter de Vries.
More on [www.sefi.be](http://www.sefi.be)

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### REMINDER CALL FOR PAPERS

**Special Issue of European Journal of Engineering Education on Inclusive Learning Environments**
Guest Editors: Kacey Beddoes, Susanne Ihsen and Grace Panther

**Overview**
Despite decades of research and efforts to recruit and retain a diverse population of engineers, women and other minorities remain underrepresented in engineering. Most research and efforts have tended to focus on those underrepresented populations as the subject of inquiry. It is now essential that we better understand the roles that engineering learning environments play in the continued lack of diversity in engineering. The aim of this special issue is to promote research that explores the role of learning environments in either supporting or undermining diversity and inclusivity in engineering. Students’ experiences with various aspects of engineering courses, including pedagogy and interactions with faculty and other students, have been shown to play a significant role in students’ decisions to leave engineering. Female and other minority students in particular report experiencing negative classroom interactions. This special issue is intended to advance such lines of inquiry. We are interested in diversity broadly construed: gender (including different types of masculinities), race/ethnicity, cultural background, sexual orientation, socioeconomic status, disability status, nationality, age, and learning styles. Quantitative, qualitative, and mixed methods studies are welcomed, as are theoretical contributions. Manuscripts must be original contributions not previously published or under review elsewhere.

**Target Timeline**
- July 15, 2016: First drafts due
- October 1, 2016: Notification of contingent acceptance
- December 1 2016: Revisions due
- February 1 2017: Notification of acceptance
- March 1 2017: Final drafts due

**Formatting Guidelines:** Manuscripts must strictly adhere to all EJEE style guidelines: [http://www.tandfonline.com/action/authorSubmission?journalCode=ceee20&parent=instructions#VbpnukV4Gjw](http://www.tandfonline.com/action/authorSubmission?journalCode=ceee20&parent=instructions#VbpnukV4Gjw)

**Questions:** Please contact Susanne Ihsen - SEFI WG on Gender and Diversity Chairperson ([ihsen@tum.de](mailto:ihsen@tum.de)) or Kacey Beddoes—SEFI WG on Gender and Diversity Deputy-Chairperson ([kacey_beddoes@uml.edu](mailto:kacey_beddoes@uml.edu))

### 18th SEFI Mathematics Working Group Seminar

The seminar will be held on 27-29 June 2016 in Gothenburg, Sweden. The SEFI (European Society for Engineering Education) Mathematics Working Group (MWG) was established in 1982. The aims of the Working Group include providing a forum for the exchange of views and ideas amongst those interested in engineering mathematics, and promoting a fuller understanding of the role of mathematics in the engineering curriculum, and its relevance to industrial needs. The Working Group issued the third edition of its curriculum document (“A Framework for Mathematics Curricula in Engineering Education”) in September 2013.

In summer 2016, the 18th SEFI MWG seminar will be organised by Chalmers University of Technology in Gothenburg, Swe-
The overarching theme of the seminar will be the concept of mathematical competencies. This includes in particular the following issues: Transition to higher education for traditional and adult learners; Learning mathematics through project work; Mathematical competencies in web-based learning scenarios; Using technology to improve mathematics education. Keynote speakers will include: Tom Lindstrøm, University of Oslo, Norway; Jana Madjarova, Chalmers University of Technology, Sweden; and Mogens Niss, Roskilde University, Denmark.

More information on sefi.htw-aalen.de

Bogazici University Organises ITHET 2016

The 15th International Conference on Information Technology Based Higher Education and Training—ITHET 2016 will be organised on September 8-10 2016, by Bogazici University in Istanbul, TURKEY. The organizing committee of ITHET 2016 extends a cordial invitation to come to Istanbul to meet renowned scholars and practitioners not only from the region but also from many different parts of the world, in the vibrant city of Istanbul. The venue is the beautiful campus of Bogazici University. Please note that a post conference tour will be organized to Cappadocia.

Paper Submission: Prospective participants are invited to electronically submit an extended abstract (min. 500 words, as PDF file), following the instructions available on the Conference web site. Accepted and presented papers will be copyrighted to IEEE and published in conference proceedings, which will be eligible for inclusion in the IEEE Xplore® Digital Library, once it meets the requirements of an IEEE quality review. It will then be customarily indexed by EI Compendex. Some papers will be selected for expansion into journal papers and invited to participate in the normal peer review process of IEEE Transactions on Education or IEEE Transactions on Learning Technologies.

Submission deadlines:
* Deadline for electronic submission of one page abstracts May 13, 2016
* Notification of acceptance May 27, 2016
* Submission of full papers July 22, 2016

More information on www.ithet.boun.edu.tr

FROM OUR PARTNERS

FEANI

Our colleagues from FEANI (European Federation of National Engineering Associations) will be moving offices to a new location on March 31, 2016. From April 1, 2016 the new address will be:

FEANI
Regus EU Commission
Rond Point Schuman 6, 5th floor
1040 Brussels

More information is available on www.feani.org

CESAER

The Conference of European Schools for Advanced Engineering Education and Research (CESAER) has announced the appointment of their Secretary General. David Bohmert will take office on 1 March this year, succeeding Senior Advisor Manfred Horvat. A Dutch and Swiss national, Mr. Bohmert will lead the Leuven-based CESAER Office. He will continue to work at the Swiss National Science Foundation (SNSF) as Swiss Delegate to the European Strategy Forum for Research Infrastructures (ESFRI) mandated by the State Secretariat for Education, Research and Innovation (SERI). A graduate of the University of Amsterdam, Mr. Bohmert has extensive experience in education, research and innovation in the Netherlands, Switzerland and at European level.

SEFI would like to congratulate Mr. Bohmert and wish him success in his new position.
EUA PARTICIPATES IN NEW ET2020

The first meeting of the new Education and Teaching 2020 (ET2020) working groups kicked off on 22 February 2016. Notably, it was the first time stakeholder organisations, including EUA, were invited to join some of the groups. These European Commission (EC) expert groups aim to ensure the exchange of information and experiences among member states on topics related to priorities identified in the ET 2020 strategy. In the kick-off meeting, participants underlined the importance of dialogue and peer-learning in supporting the achievement of jointly set goals. They also considered the role of the EC crucial in coordinating this on behalf of the member states.

In the current 2016-2018 term, there are six working groups that focus on a variety of topics, with one working group on modernising higher education. EUA joins this working group together with other key stakeholder organisations and experts from various member states and social partners. EUA looks forward to contributing by sharing its knowledge of the sector and representing the voice of universities in group discussions, including on themes that EUA addresses in its response to the consultation on the revision of the EU's Modernisation Agenda.

As part of its key activities, the working group on modernising higher education contributes to the planning of regular peer-learning activities on selected topics. One such initiative took place in Brussels on 25-26 February. EU member representatives and stakeholders from 14 countries discussed the role of transferable skills and social and civic competences in future higher education. Presentations and workshops focused on the role of national, sectoral and institutional strategies and mobility in facilitating the provision of these skills and competences. Participants agreed on the importance of developing and promoting such skills and competences, especially considering the rise of digital technologies in higher education, as well as to better address current societal challenges in Europe.

More information on www.eua.be

EUA launches Refugees Welcome Map

In response to Europe’s refugee crisis, EUA presented the Refugees Welcome Map on 29 February 2016. Scholars, researchers, students and university staff are among the thousands of people who have been forced to flee their countries. The Refugees Welcome Map demonstrates in an interactive way how higher education institutions all over Europe are responding by engaging them and assisting them in continuing their studies, research and academic careers.

“Access to higher education can be key in integrating refugees,” says Michael Gaebel, EUA Higher Education Policy Unit Director. “Staff can continue to work and, by gaining qualifications, students and prospective students will find better jobs and build a better future for themselves. Furthermore, a qualified person enjoys more social mobility, and would also be in a much better position to return home one day.”

Higher education institutions from Europe and beyond have responded. The Refugees Welcome Map currently contains data on more than 100 initiatives including universities’ efforts in offering bridging and language courses, providing information on study and employment opportunities, supporting refugees at local reception centres and organising cultural and integration activities.

EUA hopes that by showcasing the initiatives, they might serve as examples to others and even facilitate collaboration. In fact, the map is designed to put users in direct exchange with the featured institutions and organisations. In addition, the survey will remain open for input and EUA will continuously update the map with new data as it arrives from institutions and organisations in Europe and from abroad.

EUA will present the initial findings of the map in a webinar on 23 March 2016 at 14.00 CET. Representatives of featured universities and institutions will discuss the map and their individual initiatives.

More information on www.eua.be
CALL TO HOST WEEF/GEDC 2018 CONFERENCE

The deadline to submit bids to the IFEES/GEDC Secretariat in order to host the WEEF/GEDC 2018 conference will be August 1, 2016.

For those of interested or seriously considering hosting the joint global conference, please contact the IFEES secretariat so that the IFEES/GEDC leadership is aware of your interests and intentions and is prepared to respond to any questions, issues that you may want to raise in order to prepare an outstanding bid.

IFEES is committed to work with all its members and, based on prior experiences, will share with you any relevant, helpful information to enable you to submit a professionally prepared bid.

Consistent with past practice, bids will be reviewed by an established committee representing the leadership of IFEES/GEDC. The final decision for any global conference will be made by the two Executive Committees of IFEES and GEDC.

For more information please contact h.hoyer.ifees@gedc.info

ACA Launches two more Networks of European Higher Education Experts launched in China and South Africa

In the past several weeks ACA launched two new networks of European Higher Education Experts (EHEEs) in China and South Africa respectively, bringing the total number of similar networks to four.

On 25-26 January 2016 the Delegation of the European Union to China hosted the seminar to launch the Chinese network European Higher Education Experts (EHEEs). The event, co-organised by ACA with the NESO China Office, the EU Delegation, and supported by the Embassy of the Kingdom of the Netherlands to China and Mongolia, brought together select Chinese experts, education counselors of various EU member states and staff of the EU Delegation, to discuss about promoting educational and study abroad opportunities in Europe, or more specifically in Erasmus+ programme countries.

In support of this initiative, H.E. Ron Keller, Ambassador of The Netherlands in China, welcomed the seminar participants to the Dutch Embassy in Beijing on 25 January 2016, kindly hosting a joint reception and dinner together with ACA.

On 18 and 19 February 2016, ACA launched the fourth network of European Higher Education Experts (EHEEs) – in Cape Town, South Africa. Back to back with the Study in Europe Fair coordinated by Campus France, ACA organised the kick-off Study in Europe seminar, which gathered 12 representatives of South African higher education institutions (HEIs), mainly international relations officers and directors, who will by the end of 2017 organise a number of information sessions on the opportunities for studying in Europe, aimed to inform and guide the students from their and other interested HEIs. Like in the other countries, the aim of the event was also to bring together relevant higher education actors from within the country and provide them with a venue to debate on how to make the national expert network strong and sustainable.

The South African event was organised by ACA with the support of ACA members British Council and Campus France present in the country, while part of the seminar was kindly hosted by Ms Merle Hodges at the Cape Peninsula University of Technology, where the Study in Europe Fair took place as well, and to whom special thanks are due.

More information on www.aca-secretariat.be
**MARCH 2016**

8 – 10 **Kuala Lumpur, MA**  
Sixth International Conference on Industrial Engineering and Operations Management (link)

9-11 **Helsinki, FI**  
Nordic Educational Research Association (NERA) Annual Conference (link)

16 **San Luis Potosi, MX**  
17th CONAHEC Consortium for North American Higher Education Collaboration (link)

17 – 18 **Berkeley, CA - US**  
Granta Design 7th North American Materials Education Symposium (link)

29 March – 1 April, **San Francisco, CA - US**  
ASEE 2016 Engineering Deans Institute (EDI) Annual Conference (link)

30 **Paris, Fr**  
Journée Nationale de L’Ingénieur (link)

**APRIL 2016**

1 **Brussels, BE**  
SEFI Steering Committee (conference call)

7 – 8 **Cambridge, UK**  
Granta Design 8th Materials Education Symposium (link)

7-8 **Galway, IE**  
EUA Annual Conference (link)

11 – 13 **Abu Dhabi, UAE**  
IEEE EDUCON 2016 (link)

12-13 **Istanbul, TR**  
International Congress on new trends in HE (link)

14 **Brussels, BE**  
UNICA-SGroup-Compostela Joint Workshop (link)

18-19 **Den Haag, NL**  
The European Association of Research and Technology Organisations - EARTO 2016 annual conference (link)

**MAY 2016**

17-21 **Porto, PT**  
15th IACEE World Conference on Continuing Engineering Education (link)  
*SEFI will be represented by Bente Nørgaard, Chair of WG CEE.*

18-19 **Tartu, EE**  
European Science Events Association (Eusea) annual conference (EAC2016) (link)

25-28 **May Barcelona, ES**

26 **Munich, DE**  
SEFI Board of Directors invited by Mathworks 10:00-16:00

30 **Paris, Fr**  
Journée Nationale de L’Ingénieur (link)

Please find the complete list of our upcoming events on [www.sefi.be](http://www.sefi.be)
INTERNATIONAL PRESS REVIEW

EUROPEAN UNION

Call for proposals

Erasmus Charter for Higher Education 2014-2020 Selection 2017
Deadline: 31 March 2016
More information eur-lex.europa.eu

Erasmus+ Key Action 3: Support for policy reform – initiatives for policy innovation: European policy experimentations

The general objective of this call for proposals is to promote the improvement of the effectiveness and efficiency of education and training systems and youth policies through the collection and evaluation of evidence on the systemic impact of innovative policy measures. This call requires the involvement of high-level public authorities of the eligible countries and the use of sound and widely recognised evaluation methods based on field trials (experimentation).

The priority themes for this call in the Education and Training field are: Promoting fundamental values through Education and Training addressing diversity in the learning environment; Employment and Skills: validation of informal and non-formal learning in Education and Training; Strengthening teacher training and education by using the opportunities of new technologies (School education); Towards more innovative and entrepreneurial higher education institutions through institutional change (Higher education); VET teachers and trainers in work-based learning/apprenticeship (VET); Implementation of a framework for the assessment of the effectiveness of adult learning policies
Deadline: 14 April 2016
More information eur-lex.europa.eu

Erasmus+ for education and training

Concerning education and training, this Call covers the following actions of the Erasmus+ Programme: Key Action 2 (KA2) — Cooperation for innovation and the exchange of good practices; Strategic partnerships in the field of education, training and youth
Deadline: 26 April 2016
More information eur-lex.europa.eu

ERC Proof of Concept Grant

Frontier research often generates unexpected or new opportunities for commercial or societal application. The ERC Proof of Concept Grants aim to maximise the value of the excellent research that the ERC funds, by funding further work (i.e. activities which were not scheduled to be funded by the original ERC frontier research grant) to verify the innovation potential of ideas arising from ERC funded projects. Proof of Concept Grants are therefore on offer only to Principal Investigators whose proposals draw substantially on their ERC funded research.
Cut-off dates: 26 May 2016, 4 October 2016
More information ec.europa.eu/research

Opening soon: COFUND - Co-funding of Regional, National and International programmes

The COFUND scheme aims to stimulate regional, national or international programmes to foster excellence in researchers’ training, mobility and career development, spreading the best practices of Marie Skłodowska-Curie actions. This scheme offers co-funding to new or existing regional, national, and international programmes to open up to, and provide for, international, intersectoral and interdisciplinary research training, as well as transnational and cross-sectoral mobility of researchers at all stages of their career. The call has two strands: 1) Doctoral programmes, and 2) Fellowship programmes.
Deadline: 29 September 2016
More information ec.europa.eu/research
Info Day on “Spreading Excellence and Widening Participation” Calls 2016

The European Commission is holding an Info Day on the Spreading excellence and Widening participation Calls in Horizon 2020. During the event the Teaming, Twinning and ERA Chairs Calls for 2016 will be presented.

This information day will take place in Brussels on Friday 8th April 2016 at the premises of the European Commission (Madou Tower, Madou, B-1210 Brussels, Metro station Madou. The event begins at begins at 9:00 (registration as from 8:30) and ends at 13:00.

The official deadline was March 15, but you may try to register by e-mail to RTD-INFO-DAYS-BS@ec.europa.eu. In order to respect all security rules of the European Commission’s building, we kindly ask you to provide your passport or ID number, your nationality and your date of birth. Note that the registration is compulsory and will be done on a “first come, first served” basis.

More information on ec.europa.eu

Commission’s new Scientific Advice Mechanism kicks off with first meeting of advisors

The new Scientific Advice Mechanism that will support the European Commission with high quality, timely and independent scientific advice is now operational, with the first meeting of the newly-formed High Level Group of Scientific Advisors taking place in Brussels today.

The seven leading scientists who form the High Level Group met with Carlos Moedas, European Commissioner for Research, Science and Innovation, and with Andrus Ansip, the Commission’s Vice-President responsible for the Digital Single Market. They agreed that issues surrounding cybersecurity would be one subject for the Group’s first scientific advice to the Commission, contributing to efforts to build trust in the development of the Digital Single Market.

The group will also examine CO2 emissions from cars and vans, with a view to exploring possibilities for future policies regulating their measurement to ever closer reflect real-world driving conditions. The Group will now work with the Commission services to refine the scope of the issues at stake, and will make available a document setting out the scope of their work in the coming weeks.

More information on ec.europa.eu

7th Framework Programme for Research wraps up with final evaluation

Although the story of the 7th EU Framework Programme for Research (FP7) has officially wrapped up with the adoption of the final evaluation report by the European Commission late last month, the effects of the programme will be felt for decades to come, according to the report. On January 25, the European Commission unveiled the ex-post evaluation of the funding programme, which ran from 2007 to 2013 with a EUR 55 billion budget. The evaluation was carried out by an independent group of high-level experts to assess the impact of the programme on scientific excellence and competitiveness.

The report contains a series of recommendations to improve the funding of research in the EU, many of which have been integrated into the Horizon 2020 programme.

The evaluation report notes that a record number of participants and projects were funded under FP7. During the programme’s lifetime, a total of 136 000 eligible proposals were submitted to FP7 calls, from which 25 000 received funding. The programme maintained a global outlook, with 170 countries represented by a total of 134 000 participants. Of these, 86% came from EU countries, 8% from associated countries and 6% from the rest of the world. Germany scooped up the largest share of the funding, followed by the United Kingdom. International collaboration was an important element in FP7, and the average collaborative project involved 11 organisations from six countries and nine regions. Overall, the funding supported 29 000 organisations, of which over 70% participated in an EU research and development funding programme for the first time. The lion’s share of funding was claimed by universities and research organisations, which received 70% of the funding. The private sector and public bodies were awarded from 25% and 5% of the funding, respectively.

The programme contributed to strengthening scientific excellence in Europe, supporting the production of over 170 000 publications with an average open access rate of 54%. In addition, 650 of these were published in the high-impact journals Science and Nature. Furthermore, growth triggered by FP7 investment is forecasted to add EUR 500 billion to the European economy over 25 years.

More information on aca-secretariat.be. Full report on ec.europa.eu
Moody's: Global changes in economy, technology, and finance transforming environment for higher education

The global higher education sector is undergoing significant transition, with growing demand, increasing competition, and evolving funding models, Moody's Investors Service says in a new report. The strength of enterprise risk management and strategic positioning will drive the financial health of individual universities as they adapt to this changing environment.

"Demand will continue to grow based on the benefits of advanced education. Increasing desire for lifelong learning expands the pool of students. At the same time, globalization and new delivery models drive increased competition for students, faculty, research funding and philanthropy," Moody's Associate Managing Director Susan Fitzgerald says in "Global Higher Education Faces Period of Significant Transition." She adds, "While risk increases during transition periods, the sector overall is expected to be resilient."

Due to the significant growth in demand for education, government funding will be unable to keep pace, particularly amid competing governmental budgetary priorities. This will shape how higher education is funded globally, with students bearing a greater burden of costs. There will also be continued expansion and change in the types of student loans offered. Amid the global evolution of higher education, changes to regulatory frameworks and oversight mechanisms will intensify and accelerate. Public university funding will become increasingly tied to public policy priorities.

Over time, there will be an increase in mergers and restructurings, with more universities pursuing these arrangements to achieve economies of scale and contain expenses. Moody's says most mergers of public universities will be driven at the governmental level, rather than by individual universities. Merged entities can benefit from increased enrollment, size and programmatic diversity, but simultaneously face risks as they address the structural challenges that contributed to the merger. Some private colleges lacking brand recognition and scale will close in an increasingly competitive environment.

Beyond seeking to enroll more international students, universities are expanding their brand footprint, either by directly establishing branch campuses outside their home state or country, or partnering with universities in other countries. This can aid revenue diversification and result in a growing pipeline of students at the home campus, Moody's says. Additionally, students will seek out not only an affordable university, but one with flexible alternatives, including online learning. Online education will become a more accepted and mainstream strategy for universities across regions and programs, and will provide universities with alternative revenue streams and new branding opportunities.

Rising fixed costs are a credit challenge for many universities, particularly against a constrained revenue environment. These costs include new infrastructure costs as universities absorb debt service and facilities operating costs previously covered by their associated governments, as well as rising regulatory and compliance costs. With an aging university workforce in many countries, pension and other post-employment benefit costs will be an increasing burden for universities globally.

More information on www.moodys.com

Two Belgian research centres to merge with €1.5M new government money

Imec and iMinds are to join forces under the Imec name to create a single centre for digital and nanotechnology research. Belgium’s Imec and iMinds research centres are merging with the goal of creating a world class facility for digital and nanotechnology research. Imec is headquartered in Leuven and has offices in the Netherlands, Taiwan, US, China, India and Japan. It has 2,500 nanotech researchers and in 2014 its revenue totalled €363 million. iMinds, based in Ghent, has 1,000 staff carrying out research in areas including the Internet of Things and digital privacy and security. When the merger is complete at the end of 2016, iMinds will operate as a business unit of Imec.

“Together, we can help Flanders boost its competitiveness and claim a strong international position,” said Danny Goderis, chief executive officer of iMinds. Luc Van den hove, president and chief executive officer of Imec, said, “This merger provides us with a unique opportunity to jointly reach out to the Flemish industry.”

The government of Flanders will invest an extra €1.5 million in the new organisation.

More information www.sciencebusiness.net
**OPEN ACCESS**

Few countries ready to adopt gold standard open access to scientific journals

Dutch presidency has vowed to bring countries together on open access, but a new study reveals there is a long way to go in making journals subscription-free. Only five EU countries want to abandon the traditional journal subscription model and move to open access publication of the results of publically-funded research, according to a new study.

Alongside the Dutch government, which is using its presidency of the EU to push the case for open access, only Hungary, Romania, Sweden and the UK, share the view that academic publishers should stop charging readers a subscription and instead charge authors for publishing their papers. This gold standard open access is the route the Netherlands has been pursuing aggressively at home, and which it has pledged to steer the whole of the EU towards during its current presidency.

However, the European Commission’s study on the state of play across Europe, shows that most governments favour the green model of open access, in which researchers deposit versions of their journal articles in an online archive open to everyone. Green open access is preferred in universities and institutes in Belgium, Cyprus, Denmark, Estonia, Greece, Ireland, Lithuania, Malta, Norway, Portugal, Slovakia and Spain. The Dutch presidency will need to sort through this green and gold tug-of-war in the coming months, as it tries to broker an EU-wide agreement and arrive at a common position by May, when EU research ministers are set to meet.

Given its success in pushing the issue at home, the Netherlands is viewed by many open access advocates as the best country to bring political impetus to the movement and achieve ambitious EU-wide reform. Some researchers have urged the European Commission to use its influence and advise on which open access route to take. "With its Horizon 2020 budget of over €70 billion, the EU is capable of a much stronger stand than we can take alone," said Hans Clevers, a professor at the Hubrecht Institute and president of the Royal Netherlands Academy of Arts and Sciences. For now, the Commission accepts both gold and green open access. Researchers who opt for gold open access can get publication costs reimbursed as part of a Horizon 2020 grant. However, the Commission has warned it will adapt this policy if it finds that publishers are levying excessive article processing charges. For green open access, researchers deposit the final peer reviewed manuscript in a repository of their choice. (...)

The open access movement is propelled by growing dissatisfaction with the academic publishing business model, under which publishers are in effect charging publically-funded institutions to get access to their own research outputs. Publishers do not commonly pay for the articles they publish, or for peer review, most of which is performed free-of-charge by employees of academic institutions which, along with government agencies and foundations, also fund all the research that these journal articles are based upon. (...)

The Dutch have been stirring the pot on open access for a while now. The government last year announced that 60 per cent of research articles authored by Dutch scientists must be open access by 2019, and 100 per cent by 2024. Since then, Dutch universities have claimed a number of victories, signing new agreements on open access with publishers including Springer, Wiley, Sage and Amsterdam-based Elsevier, the largest journal publishing house in the world. More information on www.sciencebusiness.net

**MOBILITY**

Gone international: the value of mobility

The UK Higher Education International Unit's Go International programme published a report that outlines which students go abroad, where they go and considers what currently available data can tell us about the outcomes of international experience as part of a UK undergraduate programme. Gone International: the value of mobility provides the second annual national outline of the academic attainment and employment outcomes of mobile and non-mobile undergraduate students. This year the data was disaggregated to also explore the impact of mobility on black and ethnic minority students and those from disadvantaged backgrounds.

This report echoes last year’s findings and shows strong academic attainment and improved employment outcomes for mobile students. The research will provide institutions with data to support them in discussions about increasing participation of underrepresented groups in outward mobility opportunities.

The report analysed the data from the Destination of Leavers from Higher Education Survey (DLHE) and the HESA Student Record for 2013/2014. More information on www.international.ac.uk
RANKINGS

Times Higher Education Best universities in Europe 2016

Times Higher Education World University Rankings data reveal the top 200 universities in Europe. The UK has topped a ranking of the 200 best universities in Europe, taking nearly a quarter of places (46). The universities of Oxford and Cambridge and Imperial College London achieved the highest scores of all higher education institutions in the continent, based on the data and methodology used to compile the Times Higher Education World University Rankings. The rest of the top five is filled by Switzerland’s ETH Zurich – Swiss Federal Institute of Technology Zurich and the UK’s University College London (UCL). Institutions were measured on their teaching environment, research environment, citations (research influence), industry income and international outlook. Germany is the second most-represented nation in the list of the top universities in Europe, with 36 institutions, almost a third of which (11) are in the top 50. The top university in Germany is LMU Munich in 10th place. While Italy boasts 19 universities, its top-ranked institution – Scuola Normale Superiore di Pisa – only just makes the top 50.

Other strong performers relative to population size include Denmark (six universities – led by the University of Copenhagen at 33rd), the Republic of Ireland (six – led by Trinity College Dublin at 78th) and Switzerland (nine).

The east and south of Europe however generally score poorly in the ranking. Russia underperforms in the table, with just five institutions in the top 200 and one in the top 100 (Lomonosov Moscow State University at 79th) making it the lowest-ranked country relative to its population and GDP, although it ranks highly relative to its GDP per capita. Meanwhile Spain has only five universities, topped by Autonomous University of Barcelona at 70th, and is the second-lowest country when ranked in relation to its GDP.

Overall 22 countries are represented in the top 200 list, which draws upon data from the 800 universities from 70 countries in the overall THE World University Rankings. More information on www.timeshighereducation.com

PUBLICATIONS

Entrepreneurship Education at School in Europe - 2016 Edition

Developing and promoting entrepreneurship education has been one of the key policy objectives of the EU institutions and Member States for many years. Indeed, in the context of high youth unemployment, economic crises and rapid changes related to our complex knowledge-based economy and society, transversal skills such as entrepreneurship are essential not only to shape the mindsets of young people, but also to provide the skills, knowledge and attitudes that are central to developing an entrepreneurial culture in Europe. However, although some countries have already been committed to fostering entrepreneurship education for more than a decade, others are just starting.

The report focuses on primary education, lower and general upper secondary education as well as school-based initial vocational education and training. It contains information for 2014/15 from 33 countries participating in the Eurydice network. In addition, national information sheets provide an overview of entrepreneurship education in each country. More information on webgate.ec.europa.eu

New study: STEM shortage a myth?

Given that STEM (science, technology, engineering, and mathematics) fields are seen as a gateway to economic growth and innovation, the shortage of STEM students is an often-heard lament among policy makers and business leaders across Europe. This concern is growing in light of looming demographic changes, which will see a high replacement demand for high-skilled STEM professionals in the coming years. To answer the eternal question of whether the STEM pipeline needs to be expanded, the European Commission has commissioned a study titled Does Europe need more STEM graduates?. The study, produced by the Danish Technological Institute, provides an overview of the current and projected supply of and demand for STEM graduate and a more detailed assessment of STEM shortages in six member states. More information on bookshop.europa.eu
SEFI is the largest network of higher engineering education institutions (HEIs) and educators in Europe.

It is an international non-profit organisation created in 1973 to contribute to the development and improvement of HEE in Europe, to reinforce the position of the engineering professionals in society, to promote information about HEE and improve communication between teachers, researchers and students, to reinforce the university-business cooperation and to encourage the European dimension in higher engineering education.

Through its membership composed of HEIs, academic staff, students, related associations and companies, SEFI connects over 1 million students and 158000 academic staff members in 48 countries.

To reach its goals, SEFI implements diverse activities such as Annual Conferences, Ad hoc seminars/workshops/councils organised by its thematic working groups and committees, SEFI organises European Engineering Deans Conventions, publishes a series of Scientific publications (European Journal of Engineering Education) and Position Papers, is involved in European projects, cooperates with other major European and international associations and international bodies (European Commission, UNESCO, Council of Europe, OECD).

SEFI also participated in the creation of numerous international organisations such as ENAEE, IFEES, EuroPace, IACEE, IDEA, or EEDC.