



Bulgaria participates in drive towards new curricula for innovation leaders

Consensus was achieved among delegates to the European Commission event in Sofia on the urgent need to improve the quality of skills in an area key for innovation and competitiveness: e-leadership. Organisations across Europe must take advantage of new ICT developments and take up innovations which deliver business value, and this activity requires skilful leadership in a complex area. Higher and executive education courses for e-leadership have been developed in Bulgaria in line with the new curricular guidelines of the European initiative. At the event, the ESI European Software Institute – Center Eastern Europe (ESI CEE) and the New Bulgarian University demonstrated their results.

The successful European Commission event 'New Curricula for e-Leadership - Delivering Skills for an Innovative and Competitive Europe' organised together with European Software Institute – Center Eastern Europe (ESI CEE) and the New Bulgarian University took place on 20th May 2014 at the New Bulgarian University in Sofia (<http://eskills-guide.eu/events/bulgaria/>). It was the first of a series of 10 such events to take place all over Europe. *"The opening of the campaign in Bulgaria is a recognition of the leadership of our country and a sign of the maturity of the Bulgarian ICT industry,"* said **George Sharkov**, director of ESI CEE. The event was opened by an e-leader "from the future" - ESiCo NAO robot (<https://www.youtube.com/watch?v=lpJEvYRwMrs>) and attended by more than 100 participants from Bulgaria, Romania, Serbia, Greece and Cyprus, other neighbouring countries to Bulgaria and further European countries, USA and Africa.

< Photograph no. 1 >

In the opening address Ms Anna-Marie Vilamovska, Secretary for Science and Healthcare Policy of the President, read a special message from **Rosen Plevneliev**, President of the Republic of Bulgaria, clearly stating that *"it is an important challenge for Europe to create and prepare future e-leaders and to build sustainable digitized ecosystems"*. She continued that *"today our societies increasingly need new leaders with innovative and entrepreneurial way of thinking that is based on new technologies, ready to work in a more and more competitive and dynamic world"*. The President encouraged the conference participants, including employers and their associations, universities and business schools, and government institutions supporting innovation, to take the opportunity offered through this European Commission event to discuss and to agree on concrete actions for sustainable development in the field of digital competences, e-leadership and entrepreneurship.

André Richier from the European Commission drew a general picture for the coming years with respect to the new perspectives for the world economy and demographics. In this context, he stressed on the importance for Europe to foster greater productivity, growth, competitiveness, ICT-led innovation and digital jobs. Then he said that the goal of the European Commission's initiative on e-Leadership which started in 2013 is to increase the talent pool of e-leaders for enterprises (CIOs, professionals, business leaders etc.). It was followed in January 2014 by a complementary initiative on e-leadership targeting start-ups, gazelles, SMEs (entrepreneurs etc.). Both are closely linked to the promotion of digital entrepreneurship and integrated within the EU long-term e-skills strategy and the efforts made to mobilise Member States and stakeholders (Grand Coalition for Digital Jobs) and raise awareness (e-Skills for Jobs 2014 campaign, <http://eskills-week.ec.europa.eu/>).

Important milestones at European level in 2014 include the launching event of the "e-Skills for Jobs campaign" with the Greek Presidency in Athens on 6 May 2014. There will be also the Digital Venice event organised by the Italian Presidency on 8-9 July 2014. The closing event of the campaign will take place on 30 October 2014 in Rome with the Italian Presidency. The European e-Skills 2014 Conference will take place on 2-3 December 2014 in Brussels. And a major European conference on e-Leadership will be held in Brussels in June 2015.

< Photograph no. 2 >

At the opening, **Prof. Antoni Slavinski**, Chairman of the Board of the New Bulgarian University, underlined the importance of adding “e-” to the leadership profiles and the commitment of the largest private university in Bulgaria to align the programs with the EC e-competences guidelines and meet the tomorrow’s industry needs.

< Photograph no. 3 >

The keynote speaker **Dr. Paul Nielsen**, Director and CEO of the Software Engineering Institute (Carnegie Mellon), outlined the new competencies for digital era leaders, when more and more business run on software and is delivered as online services (“software is eating the world”, by Marc Andresen, 2011), and that digital-based business and cyber security are inseparable.

< Photograph no. 4 >

Richard M. Soley (Object Management Group) explained the new emerging standards that should be embraced by new digital business leaders (cloud, big data, industrial internet and smart devices), and the obvious next steps: standardizing university materials, practical coursework, curriculum, and the longer term need to focus on the *next* not just the *now*. **Werner B. Korte**, director empirica, provided latest statistical forecasts from the work of empirica for the European Commission on the ICT workforce development showing that management, architecture and analysis jobs which include a significant portion of e-leaders, are expected to grow by 2020 compared to 2011.

On the panel discussion, industry representatives on the stage and in the audience sent a number of messages, achieving consensus on many. It was stated that industry demand for ICT professionals is at least 3 times higher than current output from universities and professional qualification programs, although there are more than 20 industry initiated “software academies” or training & qualification programs in place. All speakers stated that industry should be encouraged to engage more intensely with universities and executive education programs and that there is a lack of real incentives or help for the small businesses. Multinational / foreign ICT investments are tolerated (with real incentives, including tax reduction) while the real e-leadership “labs” – small business and start-ups - are in a disadvantaged position.

e-Leadership was seen as an interesting concept and approach but a need was expressed for a clear, pragmatic message in language which is easy to understand to support the promotion of e-leadership.

The panellist **George Brashnarov**, Chairman - Bulgarian Association of Software Companies, made the point that coordination and leadership from the European Commission is important. Other panellist – **Peter Statev**, Chairman of the Bulgarian ICT Cluster, emphasized the Grand Coalition call for synergy between all stakeholders and expressed the local industry commitment and role in establishing the national coalition and action plan.

< Photograph no. 5 >

Representatives from higher education and the New Bulgarian University in particular made a number of relevant points, including that e-leaders start their education in general schooling, so that schools can contribute with appropriate teaching in maths and modern informatics from early years onwards. However, it was stated that ICT education in schools in Bulgaria has been reduced significantly and systematically due to a lack of qualified teachers and a seemingly lower demand by pupils. Industry strongly supported this protest and engaged with pilots and support as pointed out by **George Sharkov**, director of ESI European Software Institute. Education in these subjects requires properly trained teachers, and this in turn requires adequate incentives to train trainers. The industry demand for ICT professionals, trainers and e-leaders exceeds the capacity of the universities and the executive education programmes as stated by **Valentina Ivanova**, professor at New Bulgarian University. Software industry is engaged with the academia and doing pilots and providing occasional support. However, to make this involvement more systematic, elaborate long term cooperation mechanisms should be innovated and resourced.. She argued that the European Commission should promote e-leadership and quality labels for new curricula fostering e-Leadership skills. Other local universities were invited to commit to higher and executive education programmes on e-leadership. The Sofia University, Technical University of Sofia, Varna Free University, University of Ruse and others

were encouraged to assess their relevant programmes and develop a plan for programme improvement in line with the requirements documented in Curriculum Profiles developed by the European initiative.

< Photograph no.6 >

The Bulgarian government representative **Orlin Kuzov** from the Ministry of Education and Science agreed that there is a lack of e-leaders throughout industry and there is a need for improved executive education on e-leadership. He reported that a continuous awareness campaign and dedicated PR campaigns are being planned to persuade people to take up these career opportunities. In response to a proposed by the audience one special Ministry for ICT, he found the idea interesting, but to be successful it requires stronger synergy and coordination of several ministries and agencies and a higher level ICT prioritization. Finally and in respect of ICT education in schools he reported that materials are out of date and that was the reason for recent withdrawal of curricular content. The content must be modernised before teaching resumes.

There was unanimous agreement that e-leadership will be a key competence in the future economy and that the European Commission e-leadership initiative has been very timely and started at the right moment in time (more information: www.eskills-guide.eu). This European initiative in which ESI CEE and the New Bulgarian University are involved, aims to develop and recommend specific curriculum profiles for e-leaders (based on the European e-Competence Framework), and to outline the knowledge and skills necessary for business leaders to turn into e-leaders. New Bulgarian University was among the first to use the associated guidelines and apply the Curriculum Profile approach to their higher education courses. In a follow-up after the event by ESI CEE, three universities engaged in piloting and implementing in their curricula updates the e-leadership profiles and aligned their courses with the European e-Competence Framework (e-CF) – Sofia University (Faculty of Math and Informatics), Varna Free University, American University in Bulgaria (AUBG). An interest to apply the profile alignment method in other IT-intensive areas and job profiles was expressed by the Bulgarian Industrial Association (engaged with national jobs classification and involved in ESCO - Classification of European Skills/Competences, qualifications and Occupations – currently under development).

The event was complemented by a show-case of five young digital entrepreneurs and leaders “in action” of the StartItSmart pre-accelerator presenting pitches of early start-ups. The enthusiastic response of the audience proved that this is the type of e-leaders Bulgaria and Europe would need more of.

The event was followed by the launch and publication of a Memorandum for the ‘Digital National Alliance (DNA) of Bulgaria which was signed and presented at an event on 10 June 2014 where Deputy Prime Minister of the Republic of Bulgaria **Daniela Bobeva** said that *"on behalf of the Government of the Republic of Bulgaria [we] support the establishment of the Bulgarian branch of the Grand Coalition for Digital Jobs, not only because it is a useful initiative of the EU, not just because Bulgaria is among the first EU member states to establish this coalition, but because we need it"*. According to her, concerted efforts to create digital skills of adolescents and adults are only one of the objectives, and the results will be visible in electronization and increasing productivity. *"No one today can deny that science, technology and innovation play a leading role in ensuring economic growth"* she added.

< Photograph no. 7 >

Feedback from the event

“Very, very interesting panel discussion which provoked a public discussion bringing a lot of insights into problems of e-leadership and ICT in general”

Links to media articles

http://computerworld.bg/45802_novite_it_profesii_uxd_i_set

<http://news.itjobs.bg/blog/news/10-godishen-iubilej-otpraznuva-evropejskiqt-softueren-institut-iztochna-evropa/>

http://computerworld.bg/46056_ot_balgariya_zapochna_kampaniyata_za_digitalni_profesii_na_ek&ref=also

http://news.idg.bg/news/75213_esi_center_osnoven_evropejski_centar_v_oblastta_na_inovaciite

http://computerworld.bg/46050_esi_center_osnoven_evropejski_centar_v_oblastta_na_inovaciite

http://computerworld.bg/46178_podpisaha_memorandum_za_digitalnata_nacionalna_koaliciya/

http://www.capital.bg/politika_i_ikonomika/imena/2014/06/11/2320927_v_tursene_na_nova_dnk/

Links to European initiatives and reports on e-leadership and e-skills:

- European Guidelines and Quality Labels for new Curricula Fostering e-Leadership Skills: <http://eskills-guide.eu/home/>
- e-Leadership Skills for Small and Medium Sized Enterprises: <http://eskills-lead.eu/home/>
- European e-leadership skills conference 2013: <http://www.insead.edu/events/e-leadership-conference/>
- E-Skills for the 21st Century website - DG Enterprise and Industry: http://ec.europa.eu/enterprise/sectors/ict/e-skills/index_en.htm
- Grand Coalition for Digital Jobs website: <http://ec.europa.eu/digital-agenda/en/grand-coalition-digital-jobs-0>
- European e-Competence Framework (e-CF) website: <http://www.ecompetences.eu/>
- CEN Workshop on ICT Skills: <http://www.cen.eu/CEN/sectors/sectors/iss/activity/Pages/wsict-skills.aspx>
- e-Skills for Competitiveness and Innovation: Vision, Roadmap and Foresight Scenarios: <http://eskills-vision.eu/home/>
- Towards a European Quality label for ICT industry training and certification: <http://eskills-quality.eu/home/>
- E-Skills: the international dimension and the impact of globalisation: <http://www.eskills-international.com/>
- European guidelines and quality labels for Curricula for e-leadership skills: <http://eskills-guide.eu/home/>
- Monitoring and benchmarking e-skills policies and partnerships in Europe: <http://eskills-monitor2013.eu/home/>
- Fostering the ICT Profession in Europe: <http://cepis.org/index.jsp?p=827&n=940>
- Professional e-Competence in Europe: <http://cepis.org/index.jsp?p=940&n=2406>
- Monitoring e-skills demand and supply in Europe: <http://www.eskills-monitor.eu/>
- Evaluation of the Implementation of the Communication on e-Skills for the 21st Century: <http://eskills21.eu/>

Photographs:

< Photograph no. 1 >



George Sharkov, Director of the European Software Institute – Center Eastern Europe and ESico (NAO robot) at the event on ‘New Curricula for e-Leadership - Delivering Skills for an Innovative and Competitive Europe’ organised together with ESI European Software Institute – Center Eastern Europe and the New Bulgarian University on 20th May 2014

< Photograph no. 2 >



André Richier, European Commission at the event on ‘New Curricula for e-Leadership - Delivering Skills for an Innovative and Competitive Europe’ organised together with ESI European Software Institute – Center Eastern Europe and the New Bulgarian University on 20th May 2014

<Photograph no. 3>



Prof. Antoni Slavinski, Chairman of the Board of the New Bulgarian University, welcome to the event on 'New Curricula for e-Leadership - Delivering Skills for an Innovative and Competitive Europe' organised together with ESI European Software Institute – Center Eastern Europe and the New Bulgarian University on 20th May 2014

<Photograph no. 4>



Dr. Paul Nielsen, Director and CEO of the Software Engineering Institute (Carnegie Mellon) at the event on 'New Curricula for e-Leadership - Delivering Skills for an Innovative and Competitive Europe' organised together with ESI European Software Institute – Center Eastern Europe and the New Bulgarian University on 20th May 2014



< Photograph no. 5 >



George Brashnarov, Chairman - Bulgarian Association of Software Companies (middle), **Orlin Kuzov**, Ministry of Education and Science (right) and the other panellists at the event on 'New Curricula for e-Leadership - Delivering Skills for an Innovative and Competitive Europe' organised together with ESI European Software Institute – Center Eastern Europe and the New Bulgarian University on 20th May 2014

< Photograph no. 6 >



Valentina Ivanova, Professor, New Bulgarian University at the event on 'New Curricula for e-Leadership - Delivering Skills for an Innovative and Competitive Europe' organised together with ESI European Software Institute – Center Eastern Europe and the New Bulgarian University on 20th May 2014

< Photograph no. 7 >



Invitation to the launch of the National Digital Coalition, Bulgaria