## MEETINGS

## MINUTES and MAIN RESULTS of the MEETING held on 26 June 2014 in Ruse, Bulgaria

In this Meeting **107 representatives from 62 partners institutions of 35 European countries** took part, including Bulgaria, Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, UK, Croatia, Island, Liechtenstein, Norway, Serbia, The Former Yugoslav Republic of Macedonia, Turkey, Albania.

The Meeting participants were welcomed with bread, salt and flowers following an old Bulgarian habit.



1.         Opening of the First meeting         Prof. Dr A. Smrikarov         9:30 - 5           2.         Welcome Address of the Rector of the University of Ruse to the Meeting participants.         Prof. Dr A. Smrikarov         9:35 - 5           3.         Introduction of the Meeting participants.         All members         9:45 - 10           4.         WP1         .         Completed tasks in the work package.         Prof. Dr A. Smrikarov         10:00 - 1           5.         WP2         .         Discussion.         Dr Lilia Georgieva         10:15 - 1           6.         WP2         .         Virtual workshop on existing National and European frameworks for Higher Education; regort reviewing existing approaches to flexible learning, presentation of current progress.         Prof. Dr Marco Porta         10:45 - 1           7.         Coffee break         Prof. Dr Betim Cico         10:45 - 1           8.         WP4         11:10 - 1         11:10 - 1           9.         WP4         1         Creation of Computing Education Quality Assurance Team (CEQAT); 2. The evaluation framework in Computing Education and Training; 3. Literature review, surveys, and interviews with experts. Presentation of current progress.         Dr Arianit Kurti         12:00 - 1           9.         WP5         1. Best practices of digital curricula in European HEI. Presentation of current progress.         Dr Anianit Kurti	No	ITEM	SPEAKER	TIME
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The project meeting was conducted with the following agenda:

	of the University central entrance.		
13.	Buffet Lunch - Kaneff Centre		13:15 – 14:15
14.	WP8		13.13 - 14.13
14.			
	<ol> <li>Preparing Project exploitation plan;</li> <li>Creation of a European Erasmus Network</li> </ol>	Dr Kemal Tütüncü	14:20 – 14:40
	for student and lecturer exchange in the	Di Kemai Tutuncu	14.20 - 14.40
	field of Computing Education;	Prof. Dr Mirjana	
	3. Organising practical placements of	Ivanovic	
	students. Presentation of current progress.	Tranovic .	
	4. Discussion.		
15.	WP9		
	1. Preparing Project dissemination plan;	Prof. Dr A. Smrikarov	14:40 – 14:50
	2. Developing Project WEB site. Presentation		
	of current progress;		
	3. Discussion.		
16.	1. Summary report about completed work and	Prof. Dr A. Smrikarov	14:50 – 15:10
	specifying future activities;	Prof. Dr Pino Teresa	
	<ol><li>Planning the next meeting;</li></ol>	Caballero Gil	
	3. Discussion.		
17.	1. Clarifying some of the financial rules for	Assoc. Prof. Em.	15:10 – 15:40
	project work;	Stoyanka Smrikarova	
	2. Discussion.		
18.	Coffee break		15:40 – 16:00
19.	Celebrating 40 years of the Department		16:00 – 17:00
	of Computing in Ruse		
	Hall 2F.204 SIEMENS		
	A glass of champagne and cake		17:00 - 17:45
20.	Walk in the university, visit to Kaneff Centre		17:45 – 18:15

The meeting was opened by Prof. Angel Smrikarov – Coordinator of the ETN FETCH and Vice Rector of the University of Ruse.





Prof. Juliana Popova, Vice Rector of the University of Ruse, read the Greetings from KRISTALINA GEORGIEVA - EUROPEAN COMMISSIONER responsible for International Cooperation, Humanitarian Aid and Crisis Response.





Ref. Ares(2014)2001290 - 18/08/2014

KRISTALINA GEORGIEVA Member of the European Commission

Dear Mr. Rector, Dear ladies and gentlemen,

Unfortunately, I cannot join you today for the first meeting of the members of the European Thematic Network "Future education and training in computing: how to support learning at anytime anywhere", but I would like to convey my best wishes for a successful and fruitful work in this area, particularly important for all European countries.

Today, when Europe is trying to achieve sustainable growth and to overcome the effects of the financial and economic crises, investing in science and education is the way to keep Europe's competitiveness and leading position in the globalized world. A special role in these efforts for building a society, based on knowledge and innovation, is played by computer science. With no doubt this is the reason why in the consortium, created and coordinated by the Ruse University, participate 67 leading universities from 35 European countries. This is probably also the reason why this project received the highest score and was ranked first among a group of competing similar ones.

During my visit to this university in June 2013, I had the opportunity to personally discover its modern innovative spirit and academic atmosphere. It is not by coincidence that for nearly 15 years, before Bulgaria acceded to the EU, Ruse University was an initiator and a coordinator of European thematic networks. For its open character speak the facts that more than 500 foreign undergraduate and postgraduate students study here and that between 70 and 100 of its own students study every year in other European universities through the Erasmus program.

Please once again convey to all members of the European Thematic Network my sincere wishes for good health and successful joint work this and throughout the next two years, and to the participants of the international scientific conference CompSysTech – successful presentations and productive networking!

Finally, I want especially to note and congratulate the Department "Computer systems and technologies", coordinating this European consortium, on the occasion of its 40<sup>th</sup> anniversary!

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Kristalina Georgieva

The Rector of the University of Ruse, Prof. DSc Hristo Beloev, welcomed the participants in the Meeting.



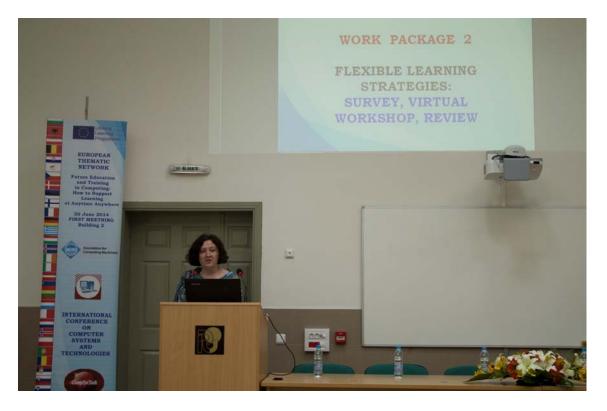
All participants in the meeting introduced themselves and their organisations.



The Coordinator of the ETN familiarized the audience with the history of consortium and the Management and Coordination of the new project.



**Prof. Dr. Angel Smrikarov – Coordinator of the ETN FETCH reported about the WP1 activities.** All tasks of this WP are performed according to the workplan and deadlines. The contact with the Education, Audiovisual and Culture Executive Agency was signed, almost all partners have signed the Partner agreements, the first payment was made to the partners, with whom this contract was signed, every day communication with all partners is in progress.



**Dr Lilia Georgieva from Heriot-Watt University, as a Leader of WP2**, presented the current WP progress, as well as the future activities to be performed by the meeting in Tenerife in September. She presented the results of the survey on establishing best practice in participating institutions for traditional and web-based approaches to Computing Education and Training, as well as Digital curricula in Computing.

The synthesized results of the survey were discussed at a virtual workshop. The participants in the workshop discussed the survey's outcomes, reflected on best practices for ensuring uniformity for student experience, competence and retention in existing National and European frameworks for Higher Education, furthermore it laid the foundation for the Strategic Framework in Higher Education 2020.

The workshop gave every participant the opportunity to comment on the presented synthesized survey's results and engage in vibrant and fruitful discussion. This ensured that the survey's analysis fully and accurately presents the existing approaches to enhancing students' experience with flexible learning without compromising retention or competence, and that both issues and best practice in the participating institutions are highlighted.

By 30.09.2014 a Report reviewing existing approaches to flexible learning has to be produced, and by 31.12.2014 – the report about Synthesizing criteria for optimal learning experience based on findings of WP2 for the European Strategic Framework for Computing Education and Training 2020 (ECFCET2020). This report will be used by WP3 as a basis for the framework.



**Prof. Dr Marco Porta from the University of Pavia and prof. Dr Betim Cico from the South East European University, Tetovo,** as a leader and co-leader of WP3, presented the work of WP3 until that moment. They emphasized on the literature review, surveys and expert interviews about approaches, methods and processes for: 1) defining best curricula and syllabi for bachelors, masters and doctorates in CS, CE, SE and IS, as well as for their implementation in HEIs; 2)

Establishing best teaching modalities (e.g. theory vs. practice, individual vs. group work, in-presence vs. distance-learning, etc.). By 30.09.2014 a report has to be ready, which will present all the data gathered from the literature review, surveys and interviews with experts about approaches, methods and processes for: 1) Defining learning outcomes based curricula and syllabi that incorporates the enhancement of (a) creativity, (b) innovation and (c) employability skills for bachelors, masters and doctorates in CS, CE, SE and IS, and for their implementation in European higher education institutions; 2) Establishing the best teaching modalities, instructional strategies and adaptive learning using social networking tools and environments for each main computing topic. The document will also account for the main outcomes of discussions carried out, which will involve all partners participating in the WP (and also possible other partners interested in the topic). In order to facilitate the collection of responses to questionnaires and surveys, as well as to allow easy statistical processing of results, three web forms were implemented. There were quite some responses from professors, but few from industry and alumni.



**Dr. Tamara Lenes from Vienna University of Technology reported about WP4.** A Computing Education Quality Assurance Team (CEQAT) was created that has to evaluate current state and propose the bases for the evaluation framework in Computing Education and Training. The CEQAT consists of representatives of all partners, participating in WP4. Each partner institution will have to form focus groups of Professors, Alumni, and Experts from industry (that employ computing students), who will participate in literature reviews, surveys, interviews with the purpose of evaluating and assessing of the current state of the art in the field. Thus there are going to be three focus groups, one consisting of Professors, one of Alumni, and one of IT industry experts. By 30.12.2014 a survey has to be conducted and a report prepared, which will contain information about the literature review undertaken, the surveys performed, and the interviews undertaken with experts (where these interviews consider approaches, methods, and processes for

evaluation of curricula and syllabi of bachelors, masters, and doctors in CS, CE, SE, and IS, and their implementation in European Higher Education Institutions). A virtual workshop will also be organised, to which apart from the project partners, other interested parties and companies outside the project will be invited. At this workshop questions not only about the curricula and syllabi will be discussed, but also about the evaluation of the methodology of teaching in computing. Using all these results CEQAT has to produce a Recommendation report from for the Evaluation Framework in Computing Education and Training.



WP5 was presented by Assoc. Prof. Dr. Arianit Kurti from Linneus University and Colin Robinson from Liverpool John Moores University, as a leader and co-leader of this WP. The work on this WP has just begun, since the first Deliverable on Best practices of digital curricula in European HEI has to be ready on 31.01.2015. This will be a report that presents the state of the art of current digital curricula within HEI in Europe in the computing education field. The methodology used for producing this report will comprise a survey as a data collection instrument, and focus group discussions with partners of the consortium. Furthermore it will include a survey of different scientific and popular publications describing the advancements in this field.



**Prof. DSc Leon Rothkrantz reported the results of implementation of WP6** and the Survey of the role of social media in e-learning, which was published as a draft document on the project web site. It starts with reviewing current tools and different social media systems that can be used in Massive Open Online Courses (MOOC) and distance learning. Chapter 2 describes the methodology of the survey and the next chapter describes the questions and summarises the results of the survey, which started with partners in January 2014. They are presented in the document in the form of tables, frequency and advanced analysis has also been performed. Then the document discusses recent developments in e-learning initiated by companies started by former employees of Universities or by companies such as Google, which proves that social media plays an important role in this new way of e-learning. At the next meeting the draft of the Questionnaire on possible roles of social media in e-learning will be presented. The data from the questionnaire will be analysed and discussed at a special Workshop of WP6 participants. This workshop will also analyse the online discussions about teaching and learning.



**Dr. Stanka Hadzhikoleva from the University of Plovdiv** presented the results of WP7. She presented the Quality plan, whose main purpose is to provide a detailed QA plan that regulates the development of an internal evaluation system. The QA plan includes established indicators, methodologies and procedures for evaluation of project activities and results. For each task it determines: who is in charge of it, how and when it will be implemented, what the expected results or products are, as well as the respective quality criteria. The leaders and co-leaders of work packages are responsible for compliance of the QA plan with the corresponding work package parameters (types of deliverables, agreed deadlines etc.) and for providing the EB with data about progress. The EB will manage activities related to work package quality assurance and evaluation. With the purpose of timely planning, reporting and assessment of the progress with the WPs and if necessary of producing suggestions for improvements, a schedule of virtual meetings of the EB will be developed as a part of the QA plan.

The developed Software tool for QA and evaluation was also presented. It will be used for QA and evaluation of the developed project materials (reviews and analyses, surveys, reports, frameworks, recommendations etc.) as well as of the meetings and conferences held. The software tool will serve for collecting diverse evidence, for applying of different quality criteria systems and procedures (chosen for the corresponding evaluated objects); for automated generation of reports, check-ups and accounts on implemented evaluations in accordance with the approved QA plan. Stanka Hadzhikoleva asked all participants in the meeting and the conference to register on this online tool and evaluate these two events.



**Dr Kemal Tütüncü from Selcuk University, the leader of WP8**, presented the Project exploitation plan, as well as the current results of the Creation of a European Erasmus Network for student and lecturer exchange in the field of Computing Education, a task which should be completed at the end of September 2014. In order to accomplish this deliverable, this activity began at the start of the project. At the second, fourth and sixth project meetings (which will be organised in September 2014, September 2015, and September 2016), the number of signed bilateral agreements and the number of exchanged students and lecturers under the Erasmus programme will be presented. Within the network partners are supposed to promote the exchange of students between universities, research institutions and companies in different countries. The results of these exchanges will have a positive impact on the students' research work and will enhance the link between theoretical knowledge and practice. To evaluate the success of these exchanges participating students and companies will report about their joint activities under the project.



**Prof. Dr Angel Smrikarov familiarised the audience with the objective and tasks of WP9 - dissemination of project results**. The ETN Coordinator presented a detailed report about the completed work and marked the forthcoming activities.



**Assoc. Prof. Em. Stoyanka Smrikarova** as manager of the ETN TRICE gave some detailed explanations about financial rules for project work.

The Meeting participants took an active part in the discussion of forthcoming activities.



ETN members visited the new Kaneff Centre, where discussions continued with a glass of wine.



On 27 June 2014 in parallel to the CompSysTech afternoon sessions from 13:30 to 17:30 there were work package meetings in hall 2.110. These meetings were 45 minutes per package, were chaired by the WP leaders or co-leaders and the participants in the meetings discussed and planned the future WP activities and events.

At the same time from 13:30 to 17:30 in hall 2.108 there were individual meetings of project financial manager with project partners, who wanted to submit financial reports or discuss financial issues.

The ETN members were also present at the Celebration of the 40 years anniversary of the Department of Computing in Ruse.



The participants in the celebration were greeted by the Regional governor, MSc Vencislav Kalchev – graduate of the department and by the Chairman of the Municipality council – Prof. Emeritus Vasil Penchev.



The rector of the university awarded a University plate to the department on the occasion of the 40-th anniversary and for raising the international reputation of the university.



The celebration finished with lighting and cutting a jubilee cake.





The meeting was announced in all regional media.



Основна тема на конференцията бе създаването на единна рамка за оценка на обучението по компютинг за целия Европейски съюз





Европейски учени участват в научната конференция в Русенския университет. Снимка: Красимир СТОЯНОВ

Българският еврокомисар Кристалина Георгиева се включи дистанционно в конференцията по компютинг, която организира Русенският университет, и поздрави организаторите с инициативата.

Неслучайно университетът от близо 15 години, още преди влизането на България в Европейския съюз, е инициатор и координатор на европейски тематични мрежи, казва комисар Георгиева и допълни поздравлението си с приветствие към 40-годишнината на компютърната катедра и пожелание за успех на научната конференция CompSysTech'14.

Сред водещите теми на работната среща са формирането на екип за осигуряване качеството в компютърното обучение, използването на социалните медии в електронното обучение, създаването на Европейска Еразъм мрежа за обмен на преподаватели и студенти в областта на компютърното образование, както и организирането на задължителни практики на студентите. В момента се разработва уеб страницата на проекта като интерактивна платформа за текуща информация, дискусии и споделяне на опит в рамките на планираните дейности.