

Federation of the Scientific-Technical Unions in Bulgaria (FNTS)
Union of Electronics, Electrical Engineering and Telecommunications (CEEC)
Ministry of Transport, Information Technology and Communications
The Communications Regulation Commission
Technical University of Sofia
Union of Scientists in Bulgaria
Telecommunications Association (ASTEL)
23-rd NATIONAL CONFERENCE
WITH INTERNATIONAL PARTICIPATION

TELECOM 2015

WE ARE CONNECTED!



PROGRAMME

15 - 16 October 2015
National Science and Technical Centre,
108 Rakovsky St. – Sofia

General sponsor:



**The conference is organized
with contribution from:
Technical University - Sofia,
Balkantel Ltd.,
IEEE Bulgarian Section,
VDE**

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TELECOM 2015 SESSIONS TIMETABLE

<i>Date</i>	<i>Time</i>	<i>Sessions</i>
Thursday 15.10.2015		Plenary Session 1, hall 3
	10.00 – 12.00	Conference Opening Chairman: Assoc. Prof. Seferin Mirtchev, PhD Greetings Papers: 1. MTITC, 2. CRC 3. MTel; 4. Balkantel
	13.00 - 14.30	Plenary Session 2, hall 3 Chairman: Assoc. Prof. Alexander Nenkov, PhD Papers: 5. Kiril Konov, 6. Kamen Rangelov, 7. Simeon Angelov
	14.30 – 15.15	Section Session 1, hall 3 NGN. NETWORKS OF THE FUTURE. SOFTWARE DEFINED NETWORKS Chairman: Assoc. Prof. Kamen Rangelov, PhD Papers: 1.1, 1.2, 1.3
	15.30 – 16.15	Section Session 2, hall 3 TELECOMMUNICATIONS AND INFORMATION TECHNOLOGIES Chairman: Prof. Ivan Kurtev, PhD Papers: 2.1, 2.2, 2.3
	16.15 - 17.20	Section Session 3, hall 3 ECONOMICS AND MARKETING OF ELECTRONIC COMMUNICATIONS Chairman: Prof. Boris Yovchev, PhD Papers: 3.1, 3.2, 3.3, 3.4, 3.5

<i>Date</i>	<i>Time</i>	<i>Sessions</i>
Thursday 15.10.2015	17.30 – 18.15	<p style="text-align: center;">Plenary Session 3, hall 3 “Round Table” Discussion</p> <p style="text-align: center;">ICT FOR SUSTAINABLE DEVELOPMENT OF THE ELECTRONIC COMMUNICATIONS AND NETWORKS IN THE CONTEXT OF GLOBALIZED EUROPEAN MARKET</p> <p>REALIZATION OF THE PROTOCOL IPV6 ON AN UNIVERSITY NETWORK</p> <p>CONTEMPORARY ASPECTS OF THE SUSTAINABLE DEVELOPMENT</p> <p>Chairmen: Assoc. Prof. Kamen Rangelov, PhD, Prof. Ivan Kurtev, PhD</p>
	18.30 – 20.00	Cocktail – Hall 2

<i>Date</i>	<i>Time</i>	<i>Sessions</i>
Friday 16.10.2015	09.00 – 09.30	<p style="text-align: center;">Section Session 4, hall 3</p> <p style="text-align: center;">TELECOMMUNICATION NETWORKS AND TELETRAFFIC – POLITICS, PLANNING AND MANAGEMENT</p> <p>Chairman: Assoc. Prof. Dimitar Arnaudov, PhD</p> <p>Papers: 4.1, 4.2</p>
	09.30 – 10.45	<p style="text-align: center;">Section Session 5, hall 3</p> <p style="text-align: center;">WIRELESS COMMUNICATIONS. SHARING OF RADIO SPECTRUM. DIGITAL SWITCHOVER</p> <p>Chairman: Prof. Luben Tonev, PhD</p> <p>Papers: 5.1, 5.2, 5.3, 5.4, 5.5</p>

<i>Date</i>	<i>Time</i>	<i>Sessions</i>
Friday 16.10.2015	11.00 - 12.30	<p>Section Session 6, hall 3</p> <p>COMMUNICATION CIRCUITS, SIGNALS AND SYSTEMS</p> <p>Chairman: Assoc. Prof. Seferin Mirtchev, PhD</p> <p>Papers: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6</p>
	12.30 – 12.45	<p>Section Session 7, hall 3</p> <p>OVERVIEW PAPERS (IN SUPPORT OF PRACTICAL APPLICATIONS)</p> <p>Chairman: Prof. Boris Yovchev, PhD</p> <p>Papers: 7.1, 7.2</p>
	12.45 – 12.55	<p>Closing of the Conference, hall 3</p> <p>Chairman: Assoc. Prof. Kamen Rangelov, PhD</p>

CONFERENCE PROGRAMME

**THURSDAY,
15.10.2015 г.**

NATIONAL SCIENCE AND TECHNICAL CENTRE

09.00 – 12.00 **Registration**

10.00 – 12.00 Plenary Session 1, hall 3
Conference Opening, Greetings

Chairman: Assoc. Prof. Seferin Mirtchev, PhD

1. DEVELOPMENT OF A MODERN COMMUNICATIONS INFRASTRUCTURE - A PREREQUISITE FOR ACCELERATED INTRODUCTION OF HIGH-SPEED BROADBAND INTERNET ACCESS

Dimitar Dimitrov – Head Of "Radiocommunications Section" Directorate of "Communications " MTITC

2. PRESENTATION FROM THE COMMUNICATIONS REGULATION COMMISSION

Tsvetelina Sevlievska – Acting General Secretary of the CRC and Director of the "Technical Regulation and Electronic Signature"

3. DYNAMIC MANAGEMENT OF CAPACITY IN THE LOW LOAD OF 3G BASE STATIONS

Mihail Mihailov – Mobiltel EAD

4. EUROPEAN STRATEGY FOR ECONOMIC DEVELOPMENT AND PROSPERITY OF BULGARIA

Nikola Dourtchev – RASTIA

12.00 – 13.00 **Lunch Break**

13.00 – 14.30 Plenary Session 2, hall 3

Chairman: Assoc. Prof. Alexander Nenkov, PhD

5. NEW STANDARDS IN TELEVISION

Kiril Konov – CEEC

6. GLIMPSES ON TELECOMMUNICATIONS - IV

Kamen Rangelov – UBS

7. INSIGHTS IN MODERN HUMAN-MACHINE INTERFACES IN SYSTEMS FOR CYBERSECURITY

Simeon Angelov – Omnitel Ltd

14.30 – 15.15 Section Session 1, hall 3

NGN. NETWORKS OF THE FUTURE. SOFTWARE DEFINED NETWORKS

Chairman: Assoc. Prof. Kamen Rangelov, PhD

1.1. SOFTWARE-DEFINED NETWORKS: DESIGN GLOBALLY, APPLY LOCALLY

Ivan Iordanov, Stefan Dimitrov – Sofia University “St. Kliment Ohridski”

1.2. A SURVEY ON THE CONTROLLER PLACEMENT IMPACT OVER THE RELIABILITY AND PERFORMANCE OF SDN NETWORKS

Diyana Kyuchukova, Georgi Hristov – University of Ruse “Angel Kanchev”

1.3. A SIMULATION EVALUATION ON THE IMPACT OF THE CONTROLLER LOCATION AND NUMBER ON THE PARAMETERS OF THE SDN

Diyana Kyuchukova, Georgi Hristov, Plamen Zahariev –University of Ruse “Angel Kanchev”

15.15 – 15.30 **Break**

15.30 – 16.15 Section Session 2, hall 3

TELECOMMUNICATIONS AND INFORMATION TECHNOLOGIES

Chairman: Prof. Ivan Kurtev, PhD

2.1. SCP-RPSC AND SC-CDMA TECHNOLOGIES IN THE TELECOMMUNICATION SYSTEMS FOR THE DEVELOPPING COUNTRIES

Veselin Demirev – Technical University of Sofia

2.2. TECHNICAL CHALLENGES TO THE MEDIA, OPERATORS AND USERS

Dr. Eng. Boyko Harlov, Eng. Ognyan Velchev – "Multimedia" BG

2.3. APPLICATIONS OF SPECTRAL GRAPH THEORY IN THE FIELD OF TELECOMMUNICATIONS

Dipl. Eng. Mircho Jordanov Mirchev – Technical University of Sofia

16.15 – 17.20 Section Session 3, hall 3

ECONOMICS AND MARKETING OF ELECTRONIC COMMUNICATIONS

Chairman: Prof. Boris Yovchev, PhD

3.1. OSI REFERENCE MODEL IN THE CONDITION OF POSTAL MARKET

Radovan Madleňák, Lucia Madleňáková, Margita Majerčáková - University of Zilina, Slovakia

3.2. ECONOMIC ASPECTS OF MARKET SATURATION IN THE MOBILE MARKET

Ass. Prof. Ph.D. Valentin Todorov Tsenov – New Bulgarian University

3.3. ABOUT SOME CONCEPTUAL PROBLEMS WITH REGARDS TO THE APPLICATION OF THE METHODOLOGY OF THE NET AVOIDED COSTS IN THE POSTAL SECTOR

Zdravko Mihaylov – Bulgarian Posts

3.4. DEMOGRAPHIC TENDENTIOUS AND STUDENTS RECRUITING – PROBLEMS AND DECISIONS

Gatyu Gatev, Rozalina Dimova – Technical University Of Varna

3.5. DEVELOPMENT A MANAGEMENT MATHEMATICAL MODEL TO CREATE AN EFFECTIVE FUNCTIONING HIGH-TECH CLUSTER

Vesela Vodenicharova, Silvia Baeva – Technical University – Sofia

17.20 – 17.30 **Break**

- 17.30 – 18.15** **Plenary Session 3, hall 3**
“Round Table” Discussion
ICT FOR SUSTAINABLE DEVELOPMENT OF THE ELECTRONIC COMMUNICATIONS AND NETWORKS IN THE CONTEXT OF GLOBALIZED EUROPEAN MARKET
REALIZATION OF THE PROTOCOL IPV6 ON AN UNIVERSITY NETWORK
CONTEMPORARY ASPECTS OF THE SUSTAINABLE DEVELOPMENT
Chairmen: Assoc. Prof. Kamen Rangelov, PhD, Prof. Ivan Kurtev, PhD
- 18.30 – 20.00** **Cocktail – Hall 2**
- Friday,**
16.10.2015 **NATIONAL SCIENCE AND TECHNICAL CENTRE**
- 09.00 – 12.00 **Registration**
- 09.00 – 09.30** **Section Session 4, hall 3**
TELECOMMUNICATION NETWORKS AND TELETRAFFIC – POLITICS, PLANNING AND MANAGEMENT
Chairman: Assoc. Prof. Dimitar Arnaudov, PhD
- 4.1. STUDY OF FULL AVAILABILITY LOSS SYSTEM WITH GENERALIZED ARRIVAL AND DEPARTURE PROCESSES
Seferin Todorov Mirtchev – Technical University Of Sofia
- 4.2. APPROACHES AND METHODS IN PLANNING OF MPLS NETWORKS
Georgi Petrov Georgiev, Seferin Todorov Mirtchev, Ignat Stefanov Stanev – University of Telecommunication and Post, Technical University of Sofia
- 09.30 – 10.45** **Section Session 5, hall 3**
WIRELESS COMMUNICATIONS. SHARING OF RADIO SPECTRUM. DIGITAL SWITCHOVER
Chairman: Prof. Luben Tonev, PhD
- 5.1. ESTIMATION OF THROUGHPUT IN LTE NETWORK, DEPENDING ON MIMO ANTENNA SYSTEMS
Philip Atanasov, Zhivko Kissovski, Sofia University
- 5.2. DIMENSIONING AND EVALUATION OF THE RADIO FREQUENCY SPECTRUM
Georgi Petrov, Boncho Balabanov – NBU Sofia
- 5.3. A METHODOLOGY FOR EVALUATION OF THE RADIATION PATTERN AND THE CHARACTERISTICS OF DIFFERENT TYPES OF ANTENNAS USING A SPECIALIZED PLATFORM
Svilen Borisov, Georgi Hristov, Plamen Zahariev – University of Ruse “Angel Kanchev”
- 5.4. A METHODOLOGY FOR EVALUATION THE PROCESSES OF RF SIGNALS TRANSFER USING A SPECIALIZED LABORATORY PLATFORM
Svilen Borisov, Plamen Zahariev, Georgi Hristov –University of Ruse “Angel Kanchev”
- 5.5. OVERVIEW OF ELECTROMAGNETIC INTERFERENCE IMPACT OVER WIRELESS SYSTEMS FOR CONTROL AND DATA ACQUISITION ADOPTING LORA™ TECHNOLOGY
Kamen Valkov, Tsveti Hranov and Ivo Dochev – Technical University of Sofia
- 10.45 – 11.00 **Break**

11.00 – 12.30

Section Session 6, hall 3

COMMUNICATION CIRCUITS, SIGNALS AND SYSTEMS

Chairman: Assoc. Prof. Seferin Mirtchev, PhD

6.1. APPLICATION OF COMPRESSED COSINES APPROXIMATION FOR 2-D DIGITAL FILTERS SYNTHESIS WITH MINIMIZING APPROXIMATION ERROR MINIMIZATION

Peter Stoyanov Apostolov, Alexei Kostadinov Stefanov – South-West University „Neofit Rilski“, Blagoevgrad

6.2. EXPERIMENTAL STUDY ON ELECTROMAGNETIC INDUCTION OF AC IN AREAS WITH ZERO MAGNETIC FLUX DENSITY

Ivan Stefanov Bozev, Radoslav Borislavov Borisov – Higher School of Telecommunications and Post, Technical University of Sofia

6.3. ANALYSIS OF THE TRANSFER OF ENERGY FROM THE MAGNETIC FIELD

Ivan Stefanov Bozev – Higher School of Telecommunications and Post

6.4. CIRCUITS FOR CHARGING OF ENERGY STORAGE ELEMENTS IN POWER SUPPLYING MODULE FOR COMMUNICATION SYSTEM

Ivan Nedyalkov – University of Telecommunication and Post

6.5. SIMPLE DIGITAL QAM-MODULATOR FOR HOBBY PROJECTS OR EDUCATIONAL PURPOSES

Tsveti Hranov, Kamen Valkov, Nikolay Hinov – Technical University Sofia

6.6. AVAILABILITY OF FSO SYSTEM IN THE PRESENCE OF RANDOM JITTER IN THE INITIAL LASER BEAM DIRECTION

Yordan Kovachev – Technical University of Sofia

11.45 – 12.15

Section Session 7, hall 3

OVERVIEW PAPERS (IN SUPPORT OF PRACTICAL APPLICATIONS)

Chairman: Prof. Boris Yovchev, PhD

7.1. ONE POSSIBILITY FOR THE INTEGRATED APPROACH FOR THE EFFECTIVE COMMUNICATIONS

Bozhidar Simeonov – CEEC

7.2. TELECOMMUNICATION SERVICES THROUGH VISIBLE LIGHT BASED ON LI FI - TECHNOLOGY

Prof. Eng. Boris Jovchev, Mrs. Eng. Rositza Mladenova – CEEC

12.20 – 12.30

CLOSING OF THE CONFERENCE, hall 3.

Chairman: Assoc. Prof. Kamen Rangelov, PhD

Information

for the participants and guests of Telecom 2015

Until 16 October 2015 detailed information on issues of the Conference can be obtained at the National House of Science and Technology in Sofia, 108 Rakovski St., V Floor, Room 506 or by phone: 02 987-97-67 and 0887508262.

Email of the conference: telecom.ceec@gmail.com

Website of the conference: <http://ceec.fnts.bg/telecom>

Registration fee: Participants with/without a paper - Euro 50, Students - Euro 25. The fee should be preferably paid before October 14, 2013 through a bank transfer on the account of:

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CEEC, TELECOM 2015, participant's name

Participants are kindly requested to send a Payment Order copy with details of payment to the Organizing Committee, or present it upon registration.

The Registration Fee can be paid in cash at the Office of CEEC: 108, Rakovsky Str., Sofia 1000.

By way of exception the Registration Fee may be paid upon arrival at the Conference site in cash (Euro 55).

The Registration Fee includes admission to all Conference events, a set of Conference materials (program, abstracts, CD with papers etc.) and cocktail.

The Organizing Committee will award a young author (up to 35 years old) for the best individually presented paper with substantial scientific research contribution.

