







Bucharest is the city which best suits Europe's "unity in diversity". It is a city that impresses through its contrasts – a unique combination of East and West, of old and new, of stillness and dynamism.

Bucharest is the capital of Romania and the first to assume its role as leader in the country's transformation into a stable and developed European nation with strong international values.

The city is committed to a long term sustainable development lighting strategy, focused on public infrastructure, architectural heritage and large entertainment events.

In 2014 Bucharest celebrated 555 years since it was first mentioned in a document issued by Vlad the Impaler himself (known as Dracula), with 3D projections on the House of the People, the 2nd largest building in the world.

Bucharest will amaze you with its capacity to innovate, its passionate heartbeat and creativity. I am looking forward to your visit to my beloved city so you can see for yourself the first edition of the Bucharest light festival, our historical sites, our architectural and cultural heritage, but most of all so you can discover the Romanian people.

Welcome to Bucharest!

### Sorin Oprescu General Mayor of Bucharest



t is with great pleasure that the LUCI network gathers in Bucharest for the first LUCI City under Microscope of the year in this International Year of Light 2015.

This event is an exceptional opportunity to discover the lighting strategy of one of the largest cities in Europe, a city that is a unique mix of old and new. Participants will get an insight into how Bucharest is modernising its street lighting through an ambitious LED replacement project in its main boulevards. They will also learn how it aims to promote its past heritage by developing a Light Way to enhance its numerous historic monuments through light. Beyond this, I am particularly looking forward to the inauguration of the first edition of the Bucharest light festival that will be taking place during this event.

We are also very pleased to be introducing a new session specifically dedicated to LEDs within the framework of the City under Microscope: the City LED Forum. Through its unique city-to-city format, this new initiative will help municipalities obtain concrete answers to their major questions on LED street lighting.

I would like to warmly thank the City of Bucharest for hosting this event and wish an enriching and inspiring City under Microscope to all participants!

Johan Nyhus President of LUCI Deputy Mayor of Gothenburg

### Wednesday 22 April

19:00 Welcome Cocktail

21:00 Walk around the old city centre

## Thursday 23 April

- 9:30 Opening of the City under Microscope
- 9:45 11:15 BUCHAREST URBAN LIGHTING STRATEGY
- 11:15 Guided tour in Bucharest city centre (by foot)

12:15 Lunch

14:00 - 15:00 BUCHAREST URBAN LIGHTING STRATEGY (CONTINUED)

- 15:30 16:30 | EVENT LIGHTING IN BUCHAREST
- 16:45 Executive Committee meeting (for LUCI EC members only)
- 18:30 Dinner
- 21:00 Inauguration of the Bucharest light festival

## Friday 24 April

- 9:30 12:45 | CITY LED FORUM
- 12:45 Lunch
- 14:00 16:20 | LIGHTING HISTORICAL HERITAGE IN BUCHAREST
- 16:20 LUCI Announcements
- 19:30 Bucharest LED lighting tour (by bus) with a stop in the Dorobanti area

21:00 Dinner

## Optional programme

### Saturday 25 April

- 10:00 Visit of the Parliament Palace the People's House
- 14:00 Lunch

15:30 Visit of the Bran Castle (Dracula's Castle)

20:45 Arrival in Bucharest

## Sunday 26 April

- 10:15 Visit of Cantacuzino Castle
- 12:15 Lunch in Sinaia
- 13:30 Visit of Peles and Pelisor Castles



# Wednesday **22** April



19:00 Welcome Cocktail / Gabroveni Inn Sorin Oprescu, General Mayor of Bucharest Mary-Ann Schreurs, LUCI Vice President, Deputy Mayor of Eindhoven

### 21:00 Walk around the old city centre

22:30 Return to the hotel



8:30 Registration and coffee / Novotel Bucharest City Centre

### 9:30 Opening of the City under Microscope

Dan Darabont, Vice Mayor of Bucharest Mary-Ann Schreurs, LUCI Vice President, Deputy Mayor of Eindhoven

## 9:45 - 11:15 | BUCHAREST URBAN LIGHTING STRATEGY

### 9:45 Bucharest Strategy 2035 – creating a sustainable city development model

Gheorghe Patrascu, Chief Architect, City of Bucharest

The Bucharest Strategic Concept 2035 aims to become an instrument for sustainable development of the Bucharest metropolis. This guiding vision for Bucharest strives for the development of the city and promotion of its brand and identity. In this respect, the Concept emphasises the coherence between necessity, history, tradition, business development, modernism and technology.

**Gheorghe Patrascu** graduated from the Institute of Architecture and studied urbanism at the University of Paris VI. After working as a project manager of many national and international design projects, he became a counsellor at the Ministry of Transport, Construction and Tourism. He also worked as an expert within the European Council Construction Committee, and was the Romanian representative at the Council of Europe Conference of Ministers for Spatial/Regional Planning.

### 10:15 Bucharest: from Little Paris, to a Black Hole, to a LED-lit city

Cosmin Gheorghiu, Executive Director, Public Utilities Department, City of Bucharest

This presentation will offer insight into the evolution of public lighting in Bucharest throughout history, from the 19th century when Bucharest was the first city in the world lit with kerosene lamps, to the Communist Regime when electricity supply was cut few hours a day for households. In the last decades, successive modernisation phases were undertaken by using new lighting technologies. At present, 9000 out of 119000 lighting points in Bucharest are LED lighting.

**Cosmin Gheorghiu** graduated from the Technical University of Civil Engineering in Bucharest. He previously worked as an Engineer, Head of Division, Chief Engineer and Director of Bucharest Public Transport Operator (RATB). Today, his main responsibilities at the municipality are to analyse the strategy for the rehabilitation, modernisation and development of Bucharest public services. He also coordinates the implementation of the public lighting service, infrastructure works and the energy supply services.

10:45 Coffee break



### Thursday **23** April

### 11:15 Guided tour in Bucharest city centre (by foot)

12:15 Lunch / Trattoria Buongiorno

## 14:00 - 15:00 | BUCHAREST URBAN LIGHTING STRATEGY (CONTINUED)

# 14:00 Bucharest strategic lighting plan – towards an innovative and smart lighting system

Valentin Littera, Head of the Lighting Department, City of Bucharest

This presentation will offer an overview of Bucharest's strategic lighting plan and its general objectives from street lighting to architectural lighting. This includes the rehabilitation and modernisation of the public lighting infrastructure and the development of integrated solutions and systems in a coherent approach – the conditions for the implementation of a smart city concept. Highlighting the cultural and urban heritage of the city through architectural lighting is also one of the priorities of the strategic lighting plan.

**Valentin Littera** graduated from the Polytechnic Institute of Bucharest, Faculty of Electro-Technic, in 2000. He worked at RATB (Bucharest Public Transport Operator) in the sector of electric bus service for five years and became the Executive Chief of Technological Equipment and Runway Construction Office, coordinating the activity of more than 300 drivers and mechanics. In 2011, he joined the municipality as the Head of the Lighting Department.

### 14:30 The Aparatorii Patriei project – ensuring equal access to public lighting

Magdalena luga, Deputy Executive Director, Public Utilities Department, City of Bucharest

The regeneration project for the Aparatorii district meets the objectives of the first National Action Plan for Energy Efficiency. Implemented in an area where the utilities network was poor, it aims to ensure equal access to public services for all citizens, ensure their safety and security, and to improve the image of the city by creating a city brand.

**Magdalena luga** studied metal engineering and has a Master's degree in Public Services from the National School of Political Science and Public Administration. She is also a European funds and public procurement expert. She represents the City of Bucharest within the Romanian Sanitation Association. Among other responsibilities, she coordinates public lighting activities specifically related to monitoring performance parameters.



Thursday 23 April

## 15:30 - 16:30 | EVENT LIGHTING IN BUCHAREST

### 15:30 iMapp Bucharest 555 festival – large-scale mapping for the Parliament Palace

Ema Stoica, Head of Cultural Projects Service, CreArt



The iMapp project highlighted the Parliament building through video-mapping installations that projected complex 3D images on the 5500 m<sup>2</sup> facade of the building. 104 intelligent projectors were used to illuminate the large facade of the Parliament. It was one of the finalists of the Best Live Events section of the EMEA InAVation Awards 2015.

**Ema Stoica** graduated from the National School of Political Science and Public Administration. She has a Master's degree in Public Sector Management from the National School of Political and Administrative Studies. Since 2007, she has initiated and coordinated projects and cultural programmes of local, regional, national and international interest and has contributed to the development of cultural, educational and social partnerships.

### 16:00 The first Bucharest light festival

Stefan Voloaca, Creative Director Spotlight, Bucharest International Light Festival

The Romanian capital will highlight the 2015 International Year of Light and the use of light based technologies with "Spotlight on Bucharest", the first festival in the city dedicated to artistic expression through light and technological innovation. The festival will transform the city into a large interactive exhibition space, firmly placing Bucharest on the cultural map of Europe. Bucharest intends to enter the specialised festivals circuit and join the renowned festivals such as the Fête des Lumières in Lyon (France) and Signal Festival in Prague (Czech Republic).

After studying philosophy at university in Bucharest and Paris, **Stefan Voloaca** joined the nascent Romanian advertising industry. Since then his professional competences have increased with a strong emphasis on creative event production.

**16:45** Executive Committee meeting (for LUCI EC members only)

18:30 Dinner / Caru cu Bere

### 21:00 Inauguration of the Bucharest light festival

23:00 Return to the hotel

Friday **24** April

## 9:30 - 12:45 | CITY LED FORUM

Organised with the support of the EU SSL-erate project, this session aims to facilitate the exchange of experiences and knowledge between cities on LED outdoor lighting. A unique opportunity for cities to have a better understanding of the latest LED evolutions and to get concrete answers to their questions.

### 9:30 LED lighting technology – issues and perspectives for cities

Leena Tähkämö, Research Scientist, Lighting Unit, Aalto University

LED technology offers various design possibilities for lighting in the urban outdoor environment, not only to improve safety, but also to create atmosphere and experiences for citizens. LED luminaires are able to provide lighting in an energy efficient way. In addition to the easy control of the light levels, the colour of the light can also be varied and adapted. The small size of the LED chip enables very versatile luminaire design. All these features can be developed into beneficial solutions in the urban landscape.

**Leena Tähkämö** received her double doctoral degree from Aalto University (Finland), and Toulouse III University (France) in 2013. Her research topic focuses on total sustainability of light sources and lighting systems, including environmental and economic analyses, as well as social impacts.

### 10:00 LED street lighting in Malaga

### Jorge Muñoz Estrada, Senior Specialist in Public Lighting, City of Malaga

The City of Malaga began to introduce its LED lighting technology in 2010 as a pilot project. This pilot consisted of 239 luminaires from seven different manufacturers. Following this initiative, the first large-scale LED project was implemented in Soho Malaga between 2013 and 2014. Since then, several projects have been realised: San Miguel Cemetery, San Telmo, etc. Moving forward, next on the city's agenda is a pedestrian walkway with presence detectors.

Jorge Muñoz Estrada is an electrical engineer and holds an MBA. He has been working for the City of Malaga since 2007. Previously, he worked as a researcher and assistant professor at the University of Malaga. He has been in charge of several LED lighting projects in Malaga. His team won the 2nd Prize in the Auroralia 2014 Award competition with the Soho Malaga project.



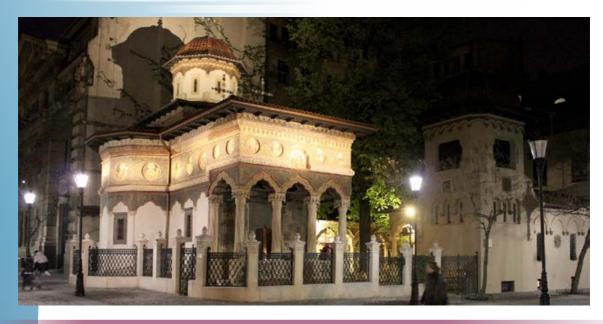
### 10:30 Coffee break

### 11:00 City-to-city meetings

This session will be an opportunity for city experts to discuss the key issues in outdoor LED lighting today, such as procurement, total cost of ownership, interoperability of control systems and social acceptance, in city-to-city meetings of 20 minutes each. Find answers to your questions with experts from municipalities from around Europe, among which:

- Bucharest on financing solutions for LED lighting projects Cosmin Gheorghiu, Executive Director, Public Utilities Department, City of Bucharest and Gabriela Crisan-Badea, Project Consultant, Tractebel Engineering
- Copenhagen on procurement and the tendering process Thomas Maare, City Lighting Responsible, City of Copenhagen
- Eindhoven on LED lighting and energy grids Arthur Noordhoek, Advisor and Project Leader Lighting, Public Space, Traffic and Environment, City of Eindhoven
- Jyväskylä on choosing the right luminaire Annukka Larsen, City of Light Coordinator, City of Jyväskylä
- Lyon on control systems and presence detection *Frédéric Durand*, Project Manager, Public Lighting Department, City of Lyon
- Malaga on LEDs and social acceptance Jorge Muñoz Estrada, Senior Specialist in Public Lighting, City of Malaga

12:45 Lunch / Novotel Bucharest City Centre



## 14:00 - 16:20 | LIGHTING HISTORICAL HERITAGE IN BUCHAREST

### 14:00 Architectural lighting in Bucharest – the "Light Way" project

Alexandru Ion, Manager, Design Department, LUXTEN Lighting Co.

Bucharest has more than 2500 monuments of architectural, archaeological or artistic significance, among which 350 are classified as national heritage monuments. Most of them are clustered in the central and northern parts of the city, along the main boulevards and in the picturesque residential neighbourhoods located within the city's main ring road. The Light Way project emphasises Bucharest's monuments through light and thus aims to

develop the tourism sector, increase the quality of life and promote Bucharest as a dynamic city with a long history.

**Alexandru Ion** is an architect and designer. He graduated from the Bucharest Architecture Faculty, and the Decorative Arts and Design Faculty. He coordinated the design of street, architectural and festive lighting projects in Romanian cities like Oradea, Timisoara, Drobeta, Constanta and Iasi, as well as some of the most important projects in Bucharest like the Arch of Triumph, the Royal Palace and the Justice Palace.

### 14:30 LED technology and architectural lighting in Bucharest

Alina Rizescu, Designer and Architect, RIZI Design

It is said that Bucharest is a city at the meeting point of Eastern and Western cultures. The development of public space during the past two centuries was shaped by these various influences. Alina Rizescu will explain its evolution and show how LED technology together with smart development can shape a bright future for the city. A perspective on Bucharest's identity focused on human experience in the public space.

*Alina Rizescu* studied architecture and has a varied experience in architecture and urban planning in Bilbao and Barcelona. She is the founder of her own design studio in Bucharest. Her areas of interest are user experience design, smart cities, sustainable development and a mix of art and technology.

### 15:00 New remote controlled lighting system for the Unirii Fountains

Mihai Savin, Executive Director, APA NOVA

Artesian fountains represent an important part in the history of Bucharest architecture, during both the interwar period and the communist regime. For more than a year, Apa Nova assumed the role of restoring the architectural value of these symbols of old architecture, through the use of modern technology. The lighting scheme implemented to highlight the Unirii fountains illustrates Bucharest's strategy aiming to combine historical and modern values.

**Mihai Savin** has worked within Apa Nova Bucuresti for 21 years. His main responsibility is to manage the Operational Performance Department. He graduated from the University of Technology of Constructions Machines and also holds an Executive Master of Business Administration. Since 2014 he manages the rehabilitation and modernisation of fountains in Bucharest.

Friday 24 April

### 15:20 Coffee break

### 15:40 Basarab bridge – lighting a landmark in Bucharest

*Florin Marius Legea,* Deputy Executive Director, Planning and Project Preparation Department, City of Bucharest

Basarab Bridge is the biggest and most complex infrastructure project achieved in Romania in the past 20 years. The key component of the finalisation of Bucharest's main ring road, it is a new connection that enhances the development of the city in the north-west area and contributes to the flow of the traffic.

Designing and implementing an adapted and modern lighting for Basarab bridge – the longest cable-stayed bridge and the most important intermodal node in Romania – has been a challenge and a priority for the city.

*Florin Marius Legea* is an economist. He is responsible for the elaboration of documents for infrastructure and transport projects – including technical approval, feasibility studies, acquisition, and evaluation of technical parameters. He is certified as an expert of public acquisitions and European funds and has extensive experience in environment, safety management systems, health at work and quality management.

### 16:00 Unirii Park – linking new technologies and architectural lighting

Radu Stanescu, Director of Major Infrastructure Division, LUXTEN Lighting Co.

Technology Hub & Hot Spot Unirii Park is a pilot project integrated both in the long-term development strategy and in the rehabilitation and modernisation programme of Bucharest. Located in Unirii Park, one of the most popular public places in the city centre, it aims to integrate the latest technologies: LED public lighting, telemanagement, wireless Internet, video surveillance and a live streaming webcam. The main objective of the project is to transform the area into a safe and environmentally friendly social media park by creating a comfortable area for working, networking, and entertainment, as well as improving citizens' security.

**Radu Stanescu** has over 10 years of experience in the IT security industry, focused on network and web application penetration testing and training services. He worked as an IT Security Consultant for several companies. Radu makes speaking appearances and gives seminars at security events such as HackerHalted, DefCamp CyberGov Security, NATO and Hacktivity.

### 16:20 LUCI Announcements

#### 17:00 Free time

19:30 Bucharest LED lighting tour (by bus) with a stop in the Dorobanti area

21:00 Dinner / Casa Doina

23:00 Return to the hotel







# Optional programme

## Saturday **25** April

- 9:30 Departure from the hotel
- 10:00 Visit of the Parliament Palace the People's House
- 14:00 Lunch / Bran Castle
- 15:30 Visit of the Bran Castle (Dracula's Castle)
- 17:15 Departure to Azuga or to Bucharest
- 20:00 Arrival at Bucharest Airport
- 20:45 Return to the hotel in Bucharest
- 20:00 Dinner and night in Azuga / LuxGarden hotel (for Sunday programme participants only)

## Sunday **26** April

- 9:30 Departure from the hotel
- 10:15 Visit of Cantacuzino Castle
- 12:15 Lunch in Sinaia / Bastion Restaurant
- 13:30 Visit of Peles and Pelisor Castles
- 15:45 Departure to Bucharest
- 18:00 Arrival at Bucharest Airport
- 18:45 Arrival at the hotel in Bucharest



# Venues

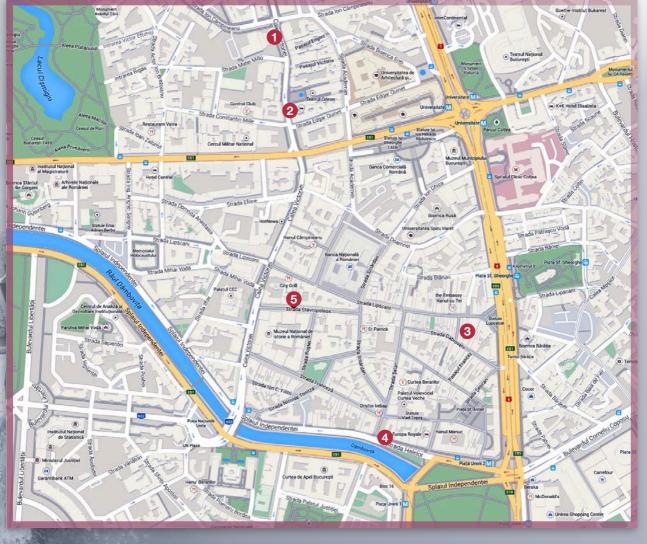
 Conference venue Thu Fri Novotel Bucharest City Centre Calea Victoriei 37B, sector 1
Accommodation Novotel Bucharest City Centre Calea Victoriei 37B, sector 1

2 Ramada Majestic Bucharest Calea Victoriei 38-40, sector 1

- Welcome cocktail Wed Gabroveni Inn Strada Gabroveni 50-53
- 4 Lunch Thu Trattoria Buongiorno Franceză 52

5 Dinner Thu Caru cu Bere Stavropoleos 5

6 Dinner Fri Casa Doina Kiseleff 4, sector 1 (entrance through Ion Mincu street)



LUCI (Lighting Urban Community International) is an international network of cities on urban lighting bringing together over 70 municipalities across the world. It creates spaces for exchange of knowledge and good practices, and helps cities develop an appropriate and sustainable use of urban lighting.

Organised twice a year, the LUCI City under Microscope events enable participants to discover the lighting strategy of a member city over a two day period.

A chance to see a city in its best light!



More information on the LUCI website: www.luciassociation.org

- Free participation for LUCI members
- 300 euros for non-LUCI members (accommodation not included)

LUC ASSOCIATION 13 rue du Griffon 69001 Lyon - France T: 00 33 4 27 11 85 37 - F: 00 33 4 27 11 85 36 www.luciassociation.org - luci@luciassociation.org



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