



CITY UNDER MICROSCOPE

TOULOUSE FRANCE

23-25 MAY 2018

#LUCIcmToulouse





First of all, let me welcome you to the City under Microscope in Toulouse, organised by the City of Toulouse and LUCI, the international network of cities on urban lighting.

On this occasion, I am very happy to welcome you for two days and three nights of discussions on urban lighting, which will be the opportunity to shine a light on all the innovation talents of Toulouse known as *la Ville Rose* – "the Pink City".

Toulouse, the fourth largest city in France, home to Airbus and the birthplace of aviation, is also known for its unique quality of life, culture and historical heritage, including the oldest basilica in the world. Our city is renowned for its industrial dynamism and an ecosystem of start-ups specialised in embedded intelligence, one of the essential building blocks of the space industry.

In recent years, our public lighting engineers have developed an embedded intelligence system that serves the population. Set up in conjunction with a local start-up, this public lighting device based on form detection has created several jobs and offers great prospects for the smart city.

We now have public lighting that, while reducing power consumption, leads to a conceptual breakthrough in the daily management of the city. This new urban tool that everyone could use outlines a major evolution that will open pathways not only to a more collaborative economy offering better services to citizens, but also to a better prospective urban planning and to potential new sources of income for our cities.

In this context, I wish that a constructive dialogue and debate on this crucial topic may be established in a spirit of global sharing of experience and in the perspective of having, by 2030, a city which is intelligently connected to its users.

Finally, I would like to invite you to an evening of inauguration of one of our latest heritage lighting initiatives.

Wishing you a fruitful and constructive dialogue,

Jean-Luc Moudenc
Mayor of Toulouse



We are very pleased to bring the LUCI network together in Toulouse, a city fully engaged in developing innovative and sustainable urban lighting for its citizens.

This City under Microscope will undoubtedly reflect the image of Toulouse: dynamic and welcoming, a place for dialogue and action. The very rich programme will allow us to address crucial questions that cities have today on smart lighting: its governance and management, and how it may improve the

public service for the benefit of society.

We will get an in-depth look at the urban lighting strategy of Toulouse, discover what has been achieved so far and what challenges lie ahead. Over the course of these two days, we have a fantastic opportunity to meet and exchange first hand with the people – from the civil servants to the lighting designers, from the urban planners and engineers to the city partners and private market parties – that have conceived and that implement daily the public lighting of Toulouse.

We will experience the city directly with night site visits, learn about the latest technologies used in the city with a hands-on demo. There will be many networking opportunities and I hope that we can build fruitful cooperation within the network and beyond.

I would like to express our deepest gratitude to the City of Toulouse for hosting what promises to be a memorable event. I am looking forward to the great learning and sharing opportunities this LUCI City under Microscope will offer.

I wish you all an inspiring time in Toulouse!

Mary-Ann Schreurs

President of LUCI Vice Mayor of Eindhoven



WEDNESDAY 23 MAY



15:00 LUCI Executive Committee meeting

19:00 Welcome cocktail

21:00 Inauguration of the President Wilson Square lighting scheme

22:00 Night walk: Toulouse heritage lighting

THURSDAY **24 MAY**



9:30 Opening speeches

10:00 KEYNOTE SPEECH The future of cities

11:30 **DEBATE** Smart lighting: city experience

13:00 Lunch

14:30 **CONFERENCE SESSION** The new Toulouse city centre approach

16:30 **KEYNOTE SPEECH** Urban lighting: genome of a connected city

19:30 Guided walking tour of Toulouse

20:30 Buffet dinner & Kara module demo

FRIDAY 25 MAY



10:00 CONVERSATION Meet the city's public lighting team

11:45 **CONVERSATION** Meet the lighting designers working on Toulouse

13:15 Lunch

14:30 WORKSHOP Toulouse urban lighting hands-on demo

19:30 Festive tapas dinner

SATURDAY **26 MAY**



Optional programme (see page 10)



15:00 Executive Committee meeting (for LUCI EC members only)

Toulouse Metropole, Building Marengo, Salle 804 A

19:00 Welcome cocktail

Salle des Illustres, Toulouse Town Hall

Jean-Luc Moudenc, Mayor of Toulouse

Emilion Esnault, City Councillor for Urban Lighting, City of Toulouse

Mary-Ann Schreurs, President of LUCI & Vice Mayor of Eindhoven



21:00 Inauguration of the President Wilson Square lighting scheme

Place du Président Thomas Wilson

Listed on the French registry of national heritage sites, the President Wilson Square is one of the liveliest public spaces in the city. Participants are invited to attend the official inauguration of its new lighting scheme.

22:00 Night walk: Toulouse heritage lighting

Toulouse counts more than 200 listed heritage sites. This night walk, led by lighting professionals from the Toulouse public lighting department, will focus on technical aspects of the heritage lighting schemes.







Conference Moderator: Sophie Voinis, Journalist

9:00 Registration and coffee

Salle Osete, Espace Duranti

9:30 Opening of the LUCI City under Microscope in Toulouse

Emilion Esnault, City Councillor for Urban Lighting, City of Toulouse **Mary-Ann Schreurs**, President of LUCI & Vice Mayor of Eindhoven

10:00 KEYNOTE SPEECH | The future of cities: public lighting and innovation for local governments

Nicolas Bouzou, Essayist and Economist & Founding Director of Asterès

Nicolas Bouzou will discuss the expected impacts of the digital revolution on cities as they relate to governance, technology, economy, and urban planning. More specifically, the session will focus on the role of public lighting within this revolution and how innovations in public lighting might serve human progress.

> Q&A session

11:00 Coffee break

11:30 DEBATE | Smart lighting and data policies: city experience and debate

This debate will be an opportunity for participants to exchange on their respective cities' policies regarding smart lighting, with a focus on data management for public service and infrastructure. How do cities manage their data? What do cities then do with that data? What role can data play in the governance of public lighting?

13:00 Lunch

• Hotel Mercure Centre Saint Georges

14:30 CONFERENCE SESSION | The new Toulouse city centre approach: reshuffling the public space

In this session, speakers will discuss how the Toulouse City Centre strategy was designed to rethink public space and enhance the historical centre of the city through innovations in urban design, technology, transportation and citizen participation.

Joan Busquets, Architect and Urban Planner, BAU
& Pieter-Jan Versluys, Architect and Urban Planner, BAU
Maurice Pradal, Toulouse Centre Project Director, Toulouse Metropole

>Q&A session

16:00 Coffee break

16:30 KEYNOTE SPEECH | Urban lighting: genome of a connected city

Vincent Grégoire-Delory, Lecturer and Director of the Higher School of Science Ethics

Future urban lighting networks are like a vast connected tissue responding to the specific needs of a certain sector, just like epigenetic properties of the genome. The presentation will seek to test a comparison between a living organism and a city, in which certain genes are assimilated to properties of public lighting. This will lead us in turn to examine such a connected city through an ethical lens.

> Q&A session

17:30 Free time

19:30 Walking tour of Toulouse

Meet in front of hotel Ibis Styles Capitole

With this walking tour led by the local Tourism Office, you will discover the history and heritage of the City of Toulouse, also known as *la Ville Rose* – the Pink City, due to the terra-cotta bricks used in many of its buildings.

20:30 Buffet dinner

Sepace EDF Bazacle

On the edge of the river Garonne, the EDF Bazacle complex is a fascinating place intertwining hydropower, heritage, culture and biodiversity. Participants will enjoy a dinner on the terrace and will have the opportunity to test out the Kara module, the smart lighting sensor implemented in Toulouse.





Conference Moderator: Sophie Voinis, Journalist

9:30 Registrations and coffee

Salle Osete, Espace Duranti

10:00 CONVERSATION Toulouse lighting strategy: meet the city's public lighting team

In this first session, participants will have the opportunity to engage with key professionals of the Public Lighting Department of the City of Toulouse. From purchase to design, to technical management, the speakers will offer a holistic vision of the lighting strategy of Toulouse. The team will explain how they work and how they envision the future of lighting for the city they call home.

Joël Lavergne, Director

Christophe Labro, Purchase and Energy Manager

Caroline Marcillou, Operations and Technical Manager

David Moras, Design and Project Manager

> Q&A session

11:15 Coffee break

11:45 CONVERSATION Hand in hand with the city: meet the lighting designers working on Toulouse

In this second session, the practitioners take the stage. Lighting designers who have worked with the City of Toulouse will present their projects and realisations. Participants will have an opportunity to learn more about how these collaborations unfolded, with a focus on citizen participation.

Lionel Bessières, Lighting Designer, Quartiers Lumières
Laurent Fachard, Lighting Engineer, Les Eclairagistes Associés
Vincent Thiesson, Lighting Designer, Agence ON

> Q&A session

12:45 LUCI announcements

Upcoming activities and events will be presented to LUCI members during these customary announcements.

13:15 Lunch

• Hotel Mercure Centre Saint Georges

14:30 WORKSHOP | Toulouse urban lighting: hands-on demo

Come and experience smart lighting first-hand during this interactive demonstration of the light innovations implemented in Toulouse, led by the city's public lighting team.

- > The Kara module, a plug & play smart streetlighting solution

 Yves Le Henaff, General Director, Kawantech & Luc Chanson, Sales Manager, Kawantech

 Coffee break
- > Eco-fit, a retrofit lamppost tailor-made for Toulouse

 Stéphane De Bon, Regional Director, Public Sector and Local Government, Philips Lighting

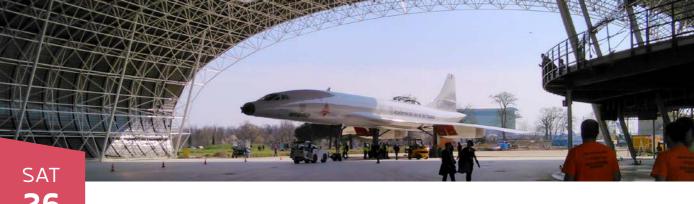
17:30 Free time

From 19:30 Festive tapas dinner

L'Alimentation Restaurant

The event wraps up with this convivial moment around delicious tapas from the French Southern culture. Discover Toulouse's culinary specialties and party spirit during a night out on the pink town.





9.30 Departure by bus

🧣 Meet at the intersection of Boulevard de Strasbourg and Allée Jean Jaurès

Visit of the Aeroscopia museum - Free visit

From the first powered aircraft designed in secret in the town of Muret by Clément Ader, to the first flight of the A380, flagship of the European aviation industry, in the skies of Blagnac, more than a century has passed. Here in Toulouse, in the birthplace of global civil and military aviation, Aeroscopia, the aviation museum, aims to preserve this historical heritage.

Every participant will be given a one-day ticket for the Aeroscopia museum.

And / Or

Discover the A380 and A350 assembly site - Guided tour

The site is entirely dedicated to final assembly and flight preparations of the A380. It occupies an area of 50 hectares, including a 10 hectare assembly hall. The Airbus A380 tour will reveal all the secrets of the world's only true double-decker, from the design stage through to its commercialisation.

This visit is reliant on early registration and national security approval.

13:00 Lunch

Museum Aeroscopia

14:30 Bus departure to the airport and city centre



wednesday **23 may**

OPENING OF THE CITY UNDER MICROSCOPE



Jean-Luc MOUDENC | Mayor of Toulouse

Born and raised in Toulouse, Jean-Luc Moudenc has always been passionate about municipal politics, which he entered shortly after graduation. In 1987, he became the youngest member of Toulouse City Council, where he has been sitting ever since. In the nineties, he was also elected the youngest member of the County Council and the Regional Council. In 1995, he was named Deputy Mayor in charge of Transportation and Urban Planning, before being elected Mayor in 2004. His tenure was marked by a development of social policies for priority neighbourhoods. In 2008, he became the leader of the municipal opposition, but he was re-elected Mayor in 2014. He has also been involved in national politics, notably as a MP (2012–2014) and since 2015 as President of France Urbaine, an organisation representing large French cities.



Emilion ESNAULT | City Councillor for Urban Lighting, City of Toulouse

Emilion Esnault, 33 years old, electronics engineer in a large European aerospace company, is also Mayor of the Montaudran District in Toulouse, City Councillor in charge of public lighting, and Vice President of Toulouse Metropole in charge of sanitation. Since 2014, under the leadership of Jean-Luc Moudenc, he led the first lighting plan in Toulouse, including a heritage enhancement component and a modernisation of the city's lighting infrastructure. After a phase of experimentation and support of the Toulouse-based start-up Kawantech by the public lighting services of the City of Toulouse, he launched in 2016 the acquisition of 485 smart lighting devices with shape detection. In three years, thanks in part to this modernisation, along with the lighting enhancements of more than 40 heritage buildings in Toulouse, the total lighting consumption of the City of Toulouse has decreased by 18%.



Mary-Ann SCHREURS | LUCI President / Vice Mayor of Innovation & Design, Culture & Sustainability, City of Eindhoven

Mary-Ann Schreurs is Vice Mayor of Innovation and Design, Culture and Sustainability of Eindhoven. She believes in design as an important engine for our economy, being just the right tool for defying big city challenges. As the first Dutch Vice Mayor of Design, she therefore introduced design in local innovation policy. Her goal is to improve citizens' lives by using the methodology of design thinking in co-creation with citizens and other stakeholders. Before she became a council member in 1994 she was co-initiator of (European) innovation projects linked to design.

THURSDAY **24 MAY**

KEYNOTE SPEECHES & CONFERENCE SESSION



Sophie VOINIS | Journalist & Conference Moderator

Sophie Voinis graduated on Dean's list from Emerson University in Boston, USA, in broadcast journalism. She is the recipient of the George Esper international prize, awarded to the best international student in journalism. She has been working on the American radio, WERS in Boston as a news anchor, then on French television in Toulouse where she was a live reporter, the daily news anchor and producer of the health as well as the aeronautics & space weekly shows. She is currently independent and frequently works as a Master of Ceremony for various conferences and round tables both in French and in English. She also teaches at journalism and communication schools in Toulouse.



Nicolas BOUZOU | Essayist and Economist & Founding Director of Asterès

Nicolas Bouzou is an essayist and economist, born in France in 1976. He is the founding director of Asterès, a leading economic consultancy. He is also the creator of the Belém Circle, a think-tank that gathers European progressive and liberal intellectuals. Nicolas is a professor of economics at the MBA Law & Management program of the University of Paris II Assas. He is the author of several best-selling books, the last one "Le travail est l'avenir de l'homme" has been published in 2017 by Les éditions de l'Observatoire. He is a regular contributor to major French economic newspapers. He can be heard or seen frequently on the radio or on television.



Joan BUSQUETS | Architect and Urban Planner, BAU B Arquitectura i Urbanisme SLP

Joan Busquets is an internationally renowned architect and urban planner from Catalonia. His designs include new urban centres, reconstruction of old and neglected urban areas and the development of infrastructure. His practice has been developed mainly in Spain (Barcelona, Toledo, Mallorca...), Portugal (Lisbon, Coimbra...), Italy (Trento, Alghero), the Netherlands (The Hague, Amsterdam, Delft...), France (Dunkerque, Rouen, Paris, Toulouse) and Switzerland. He has worked as an advisor on international projects in Buenos Aires, São Paulo, Shenzhen, Beijing, Ningbo and Singapore.



Pieter-Jan VERSLUYS | Architect and Urban Planner, Associate BAU B Arquitectura i Urbanisme SLP

Pieter-Jan Versluys has more than 15 years of international experience in large scale urban design and architectural projects. He is passionate about cities and how the built environment can foster rich diverse and dynamic public realms. He studied architecture in Antwerp and earned a Master degree in Spatial Planning and Urban Design in Barcelona. Pieter-Jan joined BAU in 2003. As project director and team lead, he is responsible for various complex urban design projects throughout Europe. His work is based on both a pragmatic and idealistic approach, linking an analytical research to design at all scales with a strong focus on people.



Maurice PRADAL | Toulouse Centre Project Director, Department of Public Spaces, Toulouse Metropole

Trained as an architect, Maurice Pradal manages the City project "Toulouse Centre" since 2010. He oversees the urban planning of Toulouse downtown public spaces, with the help of urban planner Joan Busquets from Catalonia. The *Toulouse Centre* strategy is a regeneration/re-qualification project that involves every department of Toulouse Metropole, including public lighting. From 1997 to 2009, he was Deputy Director of the Department of Urban Heritage of the City of Toulouse. He advised and assisted building and planning operations. He notably defined the urban future of Toulouse suburbs, and led studies on heritage in partnership with national government services.



Vincent GREGOIRE-DELORY | Lecturer and Director of the Higher School of Science Ethics

Vincent Grégoire-Delory is a lecturer and the director of the Higher School of Science Ethics at the Catholic Institute of Toulouse (Institut Catholique de Toulouse, ICT). He oversees the Ethics Committee of the Toulouse White Biotechnology (TWB) Consortium, a pre-industrial demonstrator in the field of industrial biotechnology. His work focuses on living systems and their ethical implications.

FRIDAY
25 MAY

CONVERSATIONS & WORKSHOP



Joël LAVERGNE | Director, Public Lighting Department, City of Toulouse

After ten years in the private sector as programmer of production automatons, Joël Lavergne joined the urban lighting department of the City of Toulouse in 2000. He oversees the municipal lighting – from design and business monitoring through to maintenance and general management. He manages a team of 68 civil servants, all of whom share Joel's desire to see progress and evolution towards ever more modern and efficient lighting.



Christophe LABRO | Purchase and Energy Manager, Public Lighting Department, City of Toulouse

A graduate of both Limoges School of Engineering and Toulouse School of Management, Christophe Labro possesses a set of truly complementary skills. Since 2010, he oversees the finances and procurement of Toulouse public lighting system, and monitors technological developments in this field. Through his position, he can appreciate first-hand the technological disruption created by LED lighting and its sustainable possibilities.



Caroline MARCILLOU | Operations and Technical Manager, Public Lighting Department, City of Toulouse

Trained as an engineer, Caroline Marcillou oversees the operations of the City of Toulouse's street lighting since 2006, with a team of 35 employees. She manages the current maintenance of the network and its continuous development. Through her position, she is at the heart of connection issues in the public lighting network.



David MORAS | Design and Project Manager, Public Lighting Department, City of Toulouse

David Moras previously worked in industrial maintenance for several companies, including Freescale and Thomson. He is now in charge of new public works for the City of Toulouse. With eight employees, he coordinates all the 200 construction sites currently in progress in the City of Toulouse and its metropolitan area.



Lionel BESSIERES | Lighting Designer, Quartier Lumières

Since graduating from Poitiers National School of Engineering as lighting engineer 20 years ago, Lionel Bessières has always been working in lighting design. He started as an assistant to a renowned architectural lighting designer, Pierre Bideau, with whom he was involved in prestigious events, such as the illumination of the Eiffel Tower. After being the technical director of a lighting theatre & TV company in Paris, he now runs his own studio Quartiers Lumières since 2006. His approach is a multidisciplinary vision blending technical skills, smart and wise creativity around a teamwork effort. Artist for light festivals, lighting designer for urban projects and architectural illuminations, technical lighting specialist, Lionel and his team always think light around the project and its context.



Laurent FACHARD | Lighting Engineer & Founder, Les Eclairagistes Associés

Laurent Fachard has developed his expertise in lighting design for more than 40 years. He has worked with professionals from every background, from film directors to landscape architects, in a move that reflects his own transition from being an apprentice in a theatre to founding his own lighting design studio. Since 1989, his studio Les Eclairagistes Associés, has placed an emphasis on landscapes and urban spaces, with leading projects in Europe, including lighting for permanent and event installations. Laurent was the artistic director of the Fête des Lumières of Lyon from 1998 to 2002. He is a founding member of the French Association of Lighting Designers (ACE), a member of the French Association for Lighting (AFE) and a member of the International Association of Lighting Designers (IALD).



Vincent THIESSON | Lighting Designer & Founder, Agence ON

Vincent Thiesson is a lighting designer, trained as an architect at the National School of Architecture of Paris-Belleville. He founded Agence ON in 2003, and has worked on multiple projects across France and Morocco with a team of urban planners, architects, engineers and lighting designers. Since 2008, he has been giving lectures and conferences at, among others, the School of Landscape Architecture in Blois, the Higher School of Landscape, Engineering and Architecture of Geneva and the National Institute of Applied Sciences of Lyon. Vincent is an active member of the French Association of Lighting Designers (ACE), and an associated member of LUCI.



Yves LE HENAFF | General Director, Kawantech

Yves graduated from the French School of Computer Science & Advanced Techniques (EPITA) in 1996 as an engineer in networks and operating systems. He then joined Vivendi Plein Cable, where he managed the technical specifications and integration of Vivendi cable technology. This led to a spin-off company dedicated to the development of cable and satellite modems, which soon became a worldwide player: IPricot. Entering the Machine to Machine business with a new start-up in 2004, Yves developed, among other things, the Coyote road assistant, with more than one million units produced and sold. Switching from connected cars to connected infrastructure, Yves created Kawantech at the end of 2011 to digitise street infrastructure itself, focusing on the automation of simple services.



Luc CHANSON | Head of Business Development, Kawantech

Luc Chanson is a graduate of the Institut National Polytechnique of Grenoble (Institute of Technology). He started his career in 1980 as a system engineer in the fields of microcomputers and printing equipment. After a ten-year stint in publishing, he returned to the software industry and, in 2002, founded and headed BeNomad, a French company specialised in software development tools. While developing his company, he worked as an independent senior consultant in the data communication industry. In 2010, he created Eco&Logic, a solution integrator and a fleet management on-line operator. One year ago, Luc joined Kawantech where he has been heading the business development division.



Stéphane DE BON | Regional Director, Public Sector and Local Government, Philips Lighting

Stéphane De Bon graduated from the Ecole Spéciale des Travaux Publics, du Bâtiment et de l'Industrie, a leading Civil Engineering higher education institution in Paris. He discovered public lighting in 2001 after his studies and joined Philips Lighting France in 2009. He is now in charge of promoting the Philips Lighting Portfolio, with his team of 11 sales engineers. From products to systems and services, light is an intelligent language for them, which connects and conveys meaning.



Conference Venues

- Salle Osete, Espace Duranti 6 Rue du Lieutenant Colonel Pélissier
- 2 Lunch Restaurant
 Hotel Mercure Centre Saint Georges,
 Room St Cyprien / Rue Saint Jérôme

Accomodation

- Hotel Ibis Styles Capitole 20 Place du Capitole
- Hotel Novotel Toulouse Centre Wilson
 15 Place du Président Thomas Wilson

Night visits & Dinners

- Welcome Cocktail WED 23 MAY 1 Place du Capitole
- 6 Lighting Inauguration WED 23 MAY Place du Président Thomas Wilson
- Buffet Dinner THUR 24 MAY Espace Bazacle / 11 Quai Saint-Pierre
- Tapas Dinner FRI 25 MAY 3 bis Rue Maurice Fonvieille

Optional Programme

- Meeting point Intersection of Boulevard de Strasbourg and Allée Jean Jaurès
- Museum Aeroscopia
 1 Allée André Turcat, 31700 Blagnac
- Airbus Assembly Line
 Usine Jean-Luc Lagardère, 31700 Blagnac

Transportation

- Toulouse-Blagnac Airport (TLS) 31703 Blagnac
- Train Station Toulouse Matabiau
 64 Boulevard Pierre Semard, 31500 Toulouse





LUCI (Lighting Urban Community International) is the international network of cities on urban lighting bringing together around 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.

A LUCI City under Microscope event enables 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!



With the support of:











