

Day 1 - Sunday, 3 October 2021
 ALAN Technical session
 West European Summer Time (UT+1)

8:50 Connection Opens

9:00 Welcome and introductions

09:00 Welcome from Spain	Rafael Rebolo (intro: C. Muñoz-Tuñón)	Director, Instituto de Astrofísica de Canarias, Spain
09:10 Welcome from the International Astronomical Union	Constance Walker (intro: P. Benvenuti)	IAU / NOIRLab
09:20 Welcome from the UN Office for Outer Space Affairs	Niklas Hedman (intro: N. Ricard)	UNOOSA

9:45 Session 1: Introduction to the Growing Threat of ALAN

Chair: Richard Green

Overview of ALAN	Ruskin Hartley	International Dark-Sky Association, USA
Global Trends on ALAN	Alejandro Sánchez Miguel	Universidad Complutense de Madrid, Spain
Threat to the Natural World	Annette Krop-Benesch	Light Pollution Initiative Nachhaltig Beleuchten, Germany
Discussion		

10:30 Coffee Break

11:00 Session 2: Astronomical Site Protection

Chair: Antonia Varela

D&QS Optical Astronomy	Richard Green	University of Arizona, USA
Basis in OTPC Experience	Casiana Muñoz-Tuñón	Instituto de Astrofísica de Canarias, Spain
Site Protection in Morocco	Zouhair Benkhaldoun	Cadi Ayyad University, Morocco
Site Protection in China	Gongbo Zhao	National Astronomical Observatory of China, China
Discussion		

12:00 Session 3: BioEnvironment and Human Health

Chair: Annette Krop-Benesch

D&QS BioEnvironment	James Lowenthal	Smith College, USA
Impact on Circadian Rhythms	Marian Rol	University of Murcia, Spain
Impacts on Human Health	Mario Motta	American Medical Association, USA
Discussion		

13:00 Lunch Break

14:30 Session 4: Dark Sky Oases

Chair: Zouhair Benkhaldoun

Recommendations for Dark Sky Oases	John Hearnshaw	University of Canterbury, New Zealand
Sustainable Development and Astrotourism	Antonia Varela Pérez	Instituto de Astrofísica de Canarias, Spain
German Dark Sky Places as best practice for protecting the night	Andreas Hänel	Dark Sky Germany, Germany
Environmentally Responsible Lighting Design	Karolina Zielinska-Dabkowska	Gdansk University of Technology, Poland
Poster: An overview of the light pollution of the night sky in Uruguay and the progress in its mitigation	Andrea Laura Sosa Oyarzabal	Centro Universitario Regional del Este (CURE), Universidad de la República, Uruguay
Poster: Effects of Artificial Light at Night on Animal Communication System and Cultural Ecology	Saeed Jafari	University of Kurdistan, Iran
Discussion		

16:00 Session 5: Measuring and Modeling ALAN

Chair: James Lowenthal

Measurement for Regional Monitoring	Salvador Ribas	Parc Astronomic Montsec, Spain
Modeling to Mitigate the Impact of ALAN	Martin Aubé	Cegep de Sherbrooke, Canada
Poster: Light Pollution Observations in Indonesia	Gunawan Admiranto	Indonesian National Institute of Aeronautics and Space, Indonesia
Poster: Darkness area and important locations for night sky screening and related activities	Mohamed Ejaferi	Libyan Center for Remote Sensing and Space Science, Libya
Poster: An Astronomical Observatory in Djebel Orbata (Gafsa): A Academic project between Tunisia, UNIPDF, INAF (Italy) and IAP (France)	Mayssa El Yazidi	Centre for Studies and Activities for Space "G. Colombo"- CISAS, Italy
Poster: Remotely sensing changes in lighting infrastructure of cities	Alexandre Simoneau	Université de Sherbrooke, Canada
Poster: Natural Night Sky Brightness during solar minimum	Miguel Serra Ricart	Instituto de Astrofísica de Canarias, Spain
Discussion		

17:00 Adjourn

8:50 Connection Opens

9:00 Session 6: Technical Framework and Basis

Chair: Andreas Hänel

Introduce UN Model Technical Framework draft

WG Technical Contributors

Discussion

Anthropogenic Light at Night: CIE's Scientific Support as a Basis for Regulations

Jennifer Veitch

International Commission on Illumination, Canada

Towards Standardized ALAN Measurement Methods & Criteria as a Policy Tool

Constantinos Bouroussis

National Technical University of Athens, Lighting Laboratory, International Commission on Illumination, Greece

Dynamic Controls and Lighting Zones

Dionyz Gasparovsky

Technical University of Bratislava, International Commission on Illumination, Slovakia

Discussion

10:30 Coffee Break

11:00 Session 7: ALAN Policy and Implementation

Chair: Richard Green

Introduce UN ALAN policy draft

WG Policy Contributors

Discussion

Policy and Legal Options for Implementation 1

Aaron Lien

University of Arizona, USA

Policy and Legal Options for Implementation 2

Martin Morgan-Taylor

DeMontfort Law School, UK

Laws of Dark Skies and Quiet Skies

Phil Cameron

University of Paris 1 - Panthéon Sorbonne, France

Discussion

13:00 Lunch Break

14:30 Session 8: Examples of National / Regional Implementation

Chair: Gong-Bo Zhao

The Chilean Norma Luminica

Pedro Sanhueza

OPCC, Office for the Protection for the Night Sky of Northern Chile

Policies in Spain: Why should artificial light at night be considered a classical pollutant

Salvador Bará

Universidade de Santiago de Compostela, Spain

Implementation and Education in Portugal

Raul Lima

School of Health of the Polytechnic of Porto (ESS | PPorto), Portugal

Regional Frameworks in Italy

Fabio Falchi

Universidade de Santiago de Compostela, Spain

Southwestern US and Hawaii

Ruskin Hartley

International Dark-Sky Association, USA

Regulations in Germany and France

Andreas Hänel

Dark Sky Germany

Discussion

16:00 Session 9: Round Table - Key Input from the Workshop Pending Issues, Next Steps

17:00 Adjourn