

THE RIGHT TO THE STARLIGHT IN LEGISLATION

international, national and local laws and regulations

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Light pollution needs comprehensive approach

Light pollution impacts on astronomy, starlight views, nocturnal landscapes, as well as the agriculture, environment, wildlife, security and cultural values. It may damage and hamper the health and behavior of humans, plants and animals, the lives and breeding cycles of plants and animals, especially migrating animals. A solution for the light pollution requires a comprehensive approach, including scientific, educational, economic, technical and social perspectives. Here, I will take a legal approach to the starlight view.

Starlight is common heritage, but its view is extremely of a local nature.

Under international law, the outer space and celestial bodies are commons and out of national sovereignty. Then the starlight, starry sky, can be identified as the common heritage of mankind. However this recognition does not help for us to insist the right to starlight views. Because those starlight views depends greatly on local places. The causes of difficulty to view starry sky do not lie in the outer space nor in the celestial bodies, but lie in each local places and conditions, such as air pollution, light pollution, tall buildings, etc. In addition, starlight views also depend on local places. Each local places has their own view of night sky, usually based on their culture, tradition, legend, environment, etc.

International laws are not prepared for the light pollution.

Although not a few MEAs (Multilateral Environmental Agreements), such as the Ramsar Convention, the World Heritage Convention, the Convention on Migratory Species or the Biodiversity Convention, are relevant to light pollution, there is not a concrete provision to set out a direct control measure on out door illumination. However, there are some provisions that indirectly refer to light pollution, as well as voluntary guidelines. For example, guidelines for EIA under the Biodiversity Convention and the Ramsar Convention require to assess light pollution. Also under the Convention on Migratory Species, some national reports referred to disturbance of marine turtle by lights.

CBD VIII/28. Impact assessment (UNEP/CBD/COP/8/31, Page 267)

Appendix 3: Aspects of Biodiversity: Composition, Structure and Key Processes.

Influenced by: *Effects of human activities that work on a similar (or larger) scale as the area under consideration. For example, by emissions into the area, diversion of surface water that flows through the area, extraction of groundwater in a shared aquifer, disturbance by noise or lights, pollution through air, etc.*

Ramsar VIII.9. Impact assessment (Ramsar COP8 Resolution VIII.9, page 20)

Appendix 2: The screening criteria

Category A: Environmental impact assessment mandatory:

Indicative list of activities for which an environmental impact assessment could be mandatory:

(c) At ecosystem level (screening questions IV and V in annex I above): *Have direct influence on legally protected areas, for example by emissions into the area, diversion of surface water that flows through the area, extraction of groundwater in a shared aquifer, disturbance by noise or lights, pollution through air.*

Basic principles of environmental law cover the light pollution.

In addition, basic principles of environmental law, including ecosystem approach, prevention of environmental harms, precautionary approach, multi disciplinary approach, sustainable development, CEPA (Communication, Education and Public Awareness), international cooperation, participatory management, prior assessment and monitoring, generally cover the light pollution problem. Those principles are categorized as follows:

Basic Principles	Basic Procedures
Ecosystem approach	Access to information
Prevention of environmental harm	Public participation
Precautionary approach	EIA and SEA
Multi discipline approach	Monitoring
CEPA	
International cooperation	

It is indispensable to take those principles into consideration in developing a comprehensive policy and an effective rule for the light pollution. Laws, regulations and measures based on basic principles of environmental law will be more persuasive and be obeyed.

Domestic laws are well prepared for the light pollution, but still need further development.

At national level, a lot of domestic local laws set out direct provisions on light pollution and the right to starlight, in Europe, America, Japan and others.

For example in Japan, local ordinances on starlight were enacted by the *Bisei* (literally means “beautiful star”) Town, Okayama Pref., 1989 and by Takayama Village, Gunma Pref., 1998, as well as by other cities including Kyoto City which adopted a new ordinance in 2007 for protection of landscape. The voluntary light control guideline and guidance were also adopted by the Ministry of Environment; a guidelines in 1998 and revised one in 2006, a local planning manual in 2000 and a guidebook in 2001.

Among legal measures taken by existing domestic laws and regulation, as shown in Table 1, not only direct control measures for the light



Figure 1. A Pamphlet on the light pollution by the Ministry of Environment, Japan

pollution, but also indirect control measures, such as local environmental management plan, clean air protection, landscape protection, energy conservation, prior assessment or public participation, play very important roles.

The starlight view should be guaranteed in every day life in the city.

The right to starlight should be realized not only in country side, where an astronomical observatory or a nature protection area is located, but also in urban areas where people, especially children live, as same as the right to clean air.

Table 1: Impact and Measures

IMPACT ORDINANCE/PLAN	Wildlife & Ecosystem	Residence & Driver	Astronomical Observation	Landscape & Amenity	Energy & CO ₂
Light Pollution Control	○	○	○	○	○
Environmental Basic Policy	○	○	○	○	○
Advertisement Control	△	○	△	○	△
Landscape			△	○	
Local Lighting Plan	○	○	○	○	○
Local Environmental Plan	○	△	△		○
Global Warming Plan					○
Local Comprehensive Plan	△	△	△	○	
Wide Administrative Plan	○	○	○		

The right to starlight is not a single subject, it is a bundle of rights. It extends over environment, ecology, energy, community, culture and spirit, as well as legend, folk tale, juvenile story, and traditional knowledge. Thus, it is supported by the basic human rights; in particular, right to live; upon the minimum standard of wholesome and cultured living, and upon dignity and quality of life. The right to starlight could also be based on the concept of the Diversity of Biology and of Culture.

Such a right will be well ensured with an effective procedure, especially EIA (Environmental Impact Assessment) including SEA (Strategic Environmental Assessment) based on public participation. Such prior assessment should take an integrated approach in order to assess multilateral aspects, such as ecological, environmental, biological, cultural, spiritual, educational and social aspects.

For effectiveness, monitoring procedures and implementation/compliance procedures are also indispensable.

Recommendation

For protection of the right to the starlight, at least, the Environmental Impact Assessment Guidelines adopted under the Convention on Biological Diversity (Dec. VIII/28) and the Ramsar Convention (Res. VIII.9), that refer to the effects of disturbance by lights, should be fully applied in both international and domestic levels.

For the action to be taken in order to make necessary measures and procedures clearer, the Starlight Initiative 2007 should propose, based on the Decision VIII/28 on EIA Guidelines under the Convention on Biological Diversity, a draft resolution and a possible guidelines on light pollution, together with a report of the Starlight Initiative 2007 as a Basic Document, in cooperation with concerned Contracting Parties and NGOs, to the coming COPs of the Convention on Biological Diversity, the Bonn Convention (CMS), the Ramsar Convention and the World Heritage Convention.