

# **Slovene Light Pollution Law – adopted on 30 August 2007**

An unofficial, shortened summary of the final version  
(prepared by Andrej Mohar on 9 September 2007)

**This is a shortened UNOFFICIAL version summarizing the most essential points of the Law, prepared for a better and faster understanding.** The Law demands luminaries shining 0% above the horizon, which is stricter than the law of the Lombardy Region, which allows 0 cd/klm above 90 degrees (in practice, that means 0.49 cd/klm). The Slovene law allows 0.00 cd/klm, in other words, absolutely no light above the horizon. This summary also features a few comments by Dark Sky Slovenia, marked as DSS.

## **Article 2                      Use**

The Law shall not apply to:

- security illumination if its functioning is subject to the regulations governing technical security systems, or by the standards in the field of technical security systems,
- security of the persons and buildings guarded in accordance with the regulations governing the security of certain persons, buildings and surroundings of buildings where offices of national organs or police are located,
- signalling in road, railway and air traffic,
- public and private events (however, the ban on sky-beamers shall apply)
- decorative illumination between 10 December and 15 January.

**DSS Comment:** The most controversial was the security illumination field. The negotiators refused to take into consideration the DSS proposition that the security illumination may be turned on for 15 min without limitations as to power and direction and then turned off. At the moment, Slovenia does not have any standards regulating security illumination so there can be no exceptions in this area. If a new standard is introduced, however, we need to ensure that it will consider the specifications of the Light Pollution Law, which will call for new negotiations.

The Ministry of the Environment and Spatial Planning of the Republic of Slovenia refused to consider the DSS proposition that the luminaries should not emit UV light and should have a stronger long-wave part of the light spectrum (the yellow part), which is essential for the protection of nocturnal animal species.

## **Article 4                      Illumination with environment-friendly luminaries**

For external illumination, only luminaries with 0% of light bulb emission above the horizon may be used.

In areas of cultural monuments, luminaries with less than 5% share of the light stream above the horizon may be used if the following conditions are met:

- the power of one luminary shall be less than 20W,
- the average illumination shall be less than 2 lx,
- the speed limit in this area shall be less than 30 km/h.

**DSS Comment:** It is practically impossible to install the 5% emission luminaries practically anywhere as it is very hard to meet all the 4 conditions at once. We can therefore say that, in Slovenia, only luminaries with 0% light bulb emission above the horizon are in fact allowed.

#### **Article 5**                    **Aim values for the illumination of roads and public surfaces**

The yearly consumption of electricity for public illumination per municipality inhabitant shall not exceed 44,5 kWh. The yearly consumptions per capita for the illumination of public roads and highways shall not exceed 5.5 kWh. The total electricity consumption per capita shall be limited to 50 kWh.

**DSS Comment:** At the moment, Slovenia uses about 90 kWh per capita for public illumination. It is planned that the aim of 50 kWh will be achieved by reducing the illumination levels at night and by replacing luminaries that are old, too strong and those shining above the horizon.

#### **Article 6**                    **Illumination of airports, ports and railways**

For airports, ports and railways, luminaries shining 0% above the horizon shall be used.

#### **Article 7**                    **Illumination of production facilities**

For production facilities, luminaries shining 0% above the horizon shall be used. The power maximums for the luminaries shall be the following:

-0.090 W/ m<sup>2</sup> during the production process and 30 min before and after the end of the process,

-0.015 W/ m<sup>2</sup> outside the production process time.

Regardless of the surface limitations, luminaries up to the total power of 300 W may be used for each production facility.

#### **Article 8**                    **Illumination of business facilities**

For business facilities, luminaries shining 0% above the horizon shall be used. The power maximums for the luminaries shall be the following:

-0.075 W/ m<sup>2</sup> during the production process and 30 min before and after the end of the process,

-0.015 W/ m<sup>2</sup> outside the production process time.

Regardless of the surface limitations, luminaries up to the total power of 180 W may be used for each business facility.

#### **Article 9**                    **Illumination of institutions**

For institutions (schools, municipalities, kindergartens, etc.), luminaries shining 0% above the horizon shall be used. The power maximums for the luminaries shall be the following:

-0.060 W/ m<sup>2</sup> during the production process and 30 min before and after the end of the process.

-0.015 W/ m<sup>2</sup> outside the production process time.

Regardless of the surface limitations, luminaries up to the total power of 180 W may be used for each institution.

**DSS Comment:** The maximum power is the total power of all luminaries used for the illumination of a building, surface (e.g. parking lot) and security illumination.

### **Article 10**                    **Illumination of façades**

For facades, luminaries shining 0% above the horizon shall be used. The average brightness of the illuminated part of the façade shall not exceed 1 cd/m<sup>2</sup>.

**DSS Comment:** Facades of all buildings may be illuminated except where residential dwellings are located.

### **Article 11**                    **Illumination of cultural monuments**

The brightness of the illuminated parts of cultural monuments shall not exceed 1 cd/ m<sup>2</sup>. The parts illuminated shall be up to 1 m below the lower part of the roof or 1m under the top of the monument for monuments without roofs. No more than 10% of the light stream may go past the façade of the cultural monument.

### **Article 12**                    **Protection of endangered species**

If there is an endangered animal species in a building, the surfaces of such building containing domicile areas (e.g. nests) of these animal species, shall not be illuminated.

### **Article 13**                    **Illumination of advertising objects**

(1) Advertising objects may be illuminated if they are located in a residential area with public surfaces which are illuminated by means of road or public surface illumination. The distance between the advertising object and the external edge of the closest illuminated public surface may not be more than 60 m measured in horizontal direction.

(2) Considered as an illuminated public surfaces from the previous paragraph are:

- road surfaces with an average brightness of the illuminated public surface at least 1 cd/ m<sup>2</sup>, measured from the direction of the road vehicle, and
- surfaces of pedestrian areas with an average brightness of the illuminated public surface at least 3 lx.

(3) Advertising objects may be illuminated by luminaries that are installed inside of them and illuminate the picture or sign from within.

(4) The electric power of all internal luminaries for the illumination of an advertising object shall not exceed the following limit values determined on the basis of the surface of the advertising object which is intended for the display of the picture of sign (hereinafter referred to as: advertising surface):

- 17 W/ m<sup>2</sup> for advertising surfaces larger than 18,5 m<sup>2</sup>,
- 27 W/ m<sup>2</sup> for advertising surfaces larger than 12,5 m<sup>2</sup> and smaller than 18,5 m<sup>2</sup>,
- 35 W/ m<sup>2</sup> for advertisement surfaces larger than 3.5 m<sup>2</sup> and smaller than 12,5 m<sup>2</sup>,
- 60 W/ m<sup>2</sup> for advertisement surfaces larger than 2 m<sup>2</sup> and smaller than 3.5 m<sup>2</sup>,
- 80 W/ m<sup>2</sup> for advertisement surfaces smaller than 2 m<sup>2</sup>.

(5) Regardless of the provisions of the previous paragraph, advertising objects may also be illuminated by external luminaries shining downwards and whose electric power does not

exceed the limit values from the previous paragraph according to the advertising surface provisions if it is ensured that:

- the advertising surface is larger than 20 m<sup>2</sup> and the luminaries are turned off between 24:00 and 5:00 hrs, or
- the advertising object is designed for displaying at least three pictures or signs one after another.

(6) Regardless of the provisions of the first paragraph hereunder, advertising objects located no more than 60m from the external edge of a highway or high-speed road as measured in the horizontal direction, may be illuminated by advertising object illumination if:

- the advertising surface of the object is illuminated by external luminaries shining downwards and whose electric power is limited according to the provisions of the fourth paragraph hereunder,
- the advertising surface of the object is larger than 20 m<sup>2</sup>, and
- the luminaries are turned off between 24: and 5:00 hrs.

**DSS Comment:** We are not happy with this paragraph as the Law allows advertising billboards by highways and encourages the construction of large advertising billboards. The powers allowed by the Law are at least 3 times higher than proposed by DSS. Nevertheless, this Article is useful as a great majority of ugly advertising billboards illuminated by external luminaries, will have to be turned off. Also, all the billboards need to be illuminated downwards (0% emission above the horizon is not required). This Article needs to be improved and made more restrictive in the future.

#### **Article 14                      Illumination of sport fields**

For sport fields, only luminaries shining 0% above the horizon shall be used. The illumination shall be turned off at the latest 1 hour after the end of sports or other events. There shall be no power limitations.

#### **Article 15                      Illumination of construction sites**

There shall be no limitation during working hours. After the end of work, luminaries shining 0% above the horizon may be used. There shall be no power limitations.

#### **Article 16                      Bans**

Sky-beamers shall be forbidden.

It shall be forbidden to illuminate buildings on the walls where windows of residential dwellings are located.

#### **Article 17                      Limitations for the illumination of secured premises**

Secured premises shall be all premises where people are located frequently and for longer periods of time.

The limit values for the illumination of windows of secured premises shall be the following:



- (5) The existing illumination of business facilities shall be adjusted by 31 December 2012.
- (6) The existing illumination of cultural monuments shall be adjusted by 31 December 2013. 50% of luminaries shall be adjusted by 31 December 2010.
- (7) The existing illumination of roads and public surfaces shall be adjusted by 31 December 2016. 25% of luminaries shall be adjusted by 31 December 2011, 50% of luminaries shall be adjusted by 31 December 2012.
- (8) The existing illumination of production facilities, airports and ports shall be adjusted by 31 December 2012. 50% of luminaries shall be adjusted by 31 December 2009.
- (9) The existing illumination of railways shall be adjusted by 31 December 2017. 25% of luminaries shall be adjusted by 31 December 2012, 50% of luminaries shall be adjusted by 31 December 2013.

**Article 31**

**Entry into force**

The provision enters into force on 22 September 2007.