



BirdLife Malta's comments to Public Consultation launched by PA and ERA with regards to 'Guidelines for the Reduction of Light Pollution in the Maltese Islands'

August 2020

BirdLife Malta has read with interest the guidelines published by ERA and PA in June 2020, to which it agrees and fully supports the initiative to see a reduction in light pollution across the Maltese Islands. The organisation has been advocating for more awareness on light pollution impacts on the natural environment for a number of years, and has especially focussed its efforts in recent years to the issue through the delivery of the LIFE Arcipelagu Garnija Project (LIFE 14 NAT/MT/991). The project has particularly studied the impact of light pollution on one of Malta's nesting seabirds (*Puffinus yelkouan*), and how various human activities close to or even situated away from its colonies are causing non-natural illumination of this bird's habitats, increasing the chances of mortality of young birds, or decreasing their nesting success.

As part of the project, BirdLife Malta has recently launched its 'Guidelines for Ecologically Responsible Lighting'¹ which is available online and for which it has invited various stakeholders to also share their feedback and comments.

Over and above these guidelines, we would like to specifically remark on the PA/ERA's guidelines as follows:

1. Enforcement

While guidelines are a set of recommended measures, simply publishing guidelines without these being reflected in any policy or legislation leaves much to be achieved. Maltese legislation already features regulations relating to light pollution and these are every so rarely enforced. Once finalised, such guidelines should form the basis of new regulations governing impacts of light pollution, with clarity over which government entity should be responsible for such enforcement. The enforcing entity needs to have the appropriate resources in terms of enforcement officers, while legislation should be clear on any warning or penalties to be vetted by the judiciary. A task force should ideally be put in place to identify areas of concern of light pollution so as to also amalgamate the efforts of different stakeholders and government authorities, and direct enforcement to any particular problematic areas.

2. Marine light pollution

The marine protected areas of the Maltese Islands are badly affected by light pollution in the form of light spill and glare from developed coastal sites. In some cases, otherwise dark-sky compliant luminaires are producing a substantial amount of light pollution due to the way in which they distribute light.

This is a problem for breeding seabirds, especially fledglings departing their colonies, as these lights invariably present themselves as the brightest point on the lower angles of the celestial hemisphere, thereby exerting a strong influence on the movement of these susceptible fledglings.

We ask for the prohibition of night time lighting of waterways including marine areas (especially those designated as SACs/SPAs). All lighting not required for the safe navigation of vessels should be full cut-off, downward facing, of appropriate intensity and distribute light appropriately such that light spill on the marine environment is minimized.

¹ <https://birdlifemalta.org/wp-content/uploads/2020/07/Guidelines-for-Ecologically-Responsible-Lighting.pdf>

Where appropriate such luminaires should be installed so that the lamps face landward or are shielded on their seaward side.

Additionally, as pointed out in the introduction of the document, various beaches (many of them protected areas) across the Maltese Islands are strongly illuminated by large and indiscriminate flood lighting for the alleged purpose of public safety. These lights are inefficient and produce unacceptable levels of light pollution. Furthermore, for people approaching the light, the levels of glare are intense, actually creating a public safety risk as visibility is reduced dramatically.

It should not be the responsibility of local councils and other authorities to provide lighting for the use of beaches after dark. Recent nesting attempts by endangered sea turtles (*Caretta caretta*) should be used to promote dark beaches.

In the case that lighting of beaches is deemed necessary then a curfew of 23.00 should be imposed.

3. Dark Sky Heritage Sites

Dark Sky Heritage Sites already exist on Gozo and Comino. Despite their designated status, illegal lighting still persists in these areas e.g. Sta. Marija Tower, Comino Chapel, Comino Police station.

We request that qualifying criteria and a map of all qualifying sites are made publically available.

Continuous monitoring should take place within Dark Sky Heritage Sites and stronger enforcement should be a priority.

4. Colour temperature

Emitted colour from installed lighting should be evaluated in terms of its emitting temperature. The issue of use of bright LED lights over the Maltese Islands as contributing to even more light pollution is a known fact, and this arises from a lack of legislation governing colour temperature used in such exterior lighting.

The recommended light levels are:

- CCT < 3000K in urban areas
- CCT < 2700K ODZ and rural
- No lighting or CCT < 2200K in protected areas

We also recommend that a map is established to inform of which colour temperature is permissible in which zonation on the Maltese Islands. Examples of zonations may include the recommended zonations presented in Table 1 below.

Table 1. (Sample) Environmental zone classification Source: Commission Internationale de l'Eclairage. Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations: Technical Report: CIE 150: 2017.

	Surrounding lighting	Environment	Examples	Lux limit
E0	Protected	Intrinsically dark	Natura 2000 sites, Dark Sky Heritage Areas.	<1
E1	Natural	Dark	Relatively uninhabited rural areas	1
E2	Rural	Low district brightness areas	Sparsely inhabited rural areas	5
E3	Suburban	Medium district brightness areas	Well inhabited rural and urban settlements	5-10
E4	Urban	High district brightness areas	Town and city centres and other commercial areas	10

5. Define the need for public lighting

There is a tendency for local councils and other authorities to illuminate as much as possible for the safety of the public. There is a high misconception that brighter lighting provides safety to property, however nowadays available technology allows ample possibilities for alternatives – from infra-red CCTV to motion-triggered lighting which can have a substantial difference with respect to constantly illuminated area.

ERA's/PA's document should provide guidance or criteria to where public lights/illumination are deemed permissible and where these should be strictly avoided. Nature permitting requirement by ERA should span toward a permit-based approach to having artificial light sources within Natura 2000 sites or other ecologically sensitive areas.

For further comments to BirdLife Malta's guidelines or for clarifications on the above remarks, responses are invited to info@birdlifemalta.org

ENDS