

BirdLife Malta Comments in Response to Proposed Fort Cambridge High Rise Hotel in Sliema
Public Consultation (REF: TRK 162247 (EA00030/15))

BirdLife Malta recognises the development of the Fort Cambridge High Rise Hotel as an opportunity to make the best use of an already altered site whilst at the same time retaining the remaining historic facades in Sliema. This proposal, if carried out sustainably, would help to advance tourism as an environmentally conscious hotel. As such, BirdLife Malta recommends that considerations are made to lower coastal light pollution and therefore limit the detrimental impact to local seabird populations.

Light pollution

As identified in BirdLife Malta’s 2014 light pollution report, over the last 36 years a total of 120 cases of stranded birds have been reported to BirdLife Malta. Within this period, there were 9 cases of stranded seabirds near the proposed project area, inclusive of the Yelkouan Shearwater, Scopoli’s Shearwater and European Storm-petrel (Table 1), representing a 7.5% of total strandings. This figure could be significantly higher however as the number of stranded birds handed over directly to government authorities are not included in this data. The 2014 report therefore highlights the high sensitivity of seabird colonies to light pollution, not just at colony sites, but also kilometres away. As the project site is located close to the coastline, this could have a detrimental impact on seabird colonies if mitigation measures are not taken.

Stranding location	N _o of birds	Yelkouan Shearwater	Scopoli's Shearwater	European Storm-petrel	% of total
Valletta	2	1	1		1.67
Sliema	4	1	2	1	3.33
Pembroke	1	1			0.83
St Julian's	1	1			0.83
Swieqi	1		1		0.83

Table 1: Stranded bird cases reported to BirdLife Malta between 1978 and 2003 close to the proposed site. Source: BirdLife Malta.

Mitigation measures

BirdLife Malta notes the planned measures in the project description statement to save on light energy by using timed, controlled and low-energy lighting during the operational stage of the project. We encourage that these are extended to include special measures to reduce the impact of light pollution. As this development could have serious consequences on wildlife and the environment, we stress the importance of considering the following suggestions during both construction and operational phases of the project:

- **Full cut-off lighting**

For external lighting to be directed downwards only, below the horizontal plane (Figure 1), and to be used for all road lighting.



Figure 1: Example of good lighting shining downwards. Source: Abacus Lighting.

- **Light restrictions**

Placing restrictions on non-beneficial interior and exterior lights, taking this into particular consideration during peak fledgling periods.

- **Using different types and wavelengths of light**

Using high pressure sodium vapour lights, instead of mercury vapour lamps, as they emit less energy waste and glow. It has also been found that different wavelengths of lights have different levels of attracting birds. Blue and red lights are the least attractive and should therefore be considered with cranes and the construction of tall buildings (Rich and Longcore, 2006).

- **Timed lighting**

We recognise that this has been recommended for the operational stage and encourage the use of motion sensors or timers to also limit light use during the construction stage.

- **Planning systems**

We recommend limiting unnecessary and multiple lights, using minimum intensity lighting and introducing zoning such as with the Gozo Dark Skies initiative.

- **Blanket prohibition on globe lights**

To completely prohibit the use of these insufficient lights which cause light pollution even when they are partially-shielded.

- **Light shields**

In the case of non-use of the above recommendations, we suggest using shields to direct external light only where it is needed so that the pattern of illumination is below the horizontal plane of the light fixture. When used in areas around breeding colonies of shearwaters and petrels, shields can significantly reduce light pollution (Reed et al, 1985). However, light shields still produce unnecessarily high levels of light and therefore light pollution and we would recommend the preferred use of the previous options.



Conclusion

BirdLife Malta recognises the environmental impacts identified in the project statement description and supports the measures that will be put in place to mitigate against these. However, this list is not exhaustive and despite putting in place light energy-saving measures, the impact of light pollution during construction and operational stages has not been considered. This response has therefore set out the potential environmental impacts this development could have on wild birds and suggested suitable lighting alternatives.

In line with these, BirdLife Malta recommends that MEPA requests an external lighting scheme for both the construction and operational phases of the development, which scheme is assessed appropriately at the EPS stage of the development application. Any exterior lighting emanating from the development should be one that does not contribute, but rather minimises the current problem of coastal light pollution across the Maltese Islands.

ENDS

REFERENCES

Articles:

Mula Laguna, J., Barbara, N. & Metzger, B., 2014. Light pollution impact on “tubenose” seabirds: an overview of areas of concern in the Maltese Islands.

Le Corre, M., Ollivier, A., Ribes, S., & Louventin, P., 2002. Light-induced mortality of petrels: a 4-year study from Reunion Island (Indian Ocean). *Biological Conservation* 105; 93–102.

Reed, J. R., Sincock, J. L., & Hailman, J. P., 1985. Light attraction in endangered procellariiform birds: Reduction by shielding upward radiation. *The Auk* 102: 377-383.

Rich, C., & Longcore, T., 2006. Ecological consequences of artificial night lighting. Island Press, chapter 3, Bats and their insect prey at streetlights, pg 43-60, chapter 5, Influences of artificial lights on marine birds, pg 94-113.

Sultana, J., Borg, J.J., Gauci, C. & Falzon, V., 2011. *The Breeding birds of Malta*. BirdLife Malta, Malta.

Telfer, T. C., Sincock, J. L., Byrd, G. V., & Reed, J. R., 1987. Attraction of Hawaiian seabirds to lights: Conservation efforts and effects of moon phase. *Wildl. Soc. Bull.* 15: 406-413.

Websites:

Gozo Dark Skies Initiative, online at: <http://www.maltastro.org/blog/?p=92>.